

<400> 1058

Glu Phe Pro Ala Arg Val Thr Pro Val Ala Glu Gln Leu Gly Val Ser
 1 5 10 15
 Leu Thr Leu His Pro Asp Asp Pro Pro Arg Pro Leu Phe Gly Leu Pro
 20 25 30
 Arg Ile Ala Ser Ser Ala Glu Asp Tyr Gln Ala Leu Phe Asp Ala Val
 35 40 45
 Pro Ser Lys Ala Asn Gly Ile Cys Leu Cys Thr Gly Ser Leu Gly Val
 50 55 60
 Arg Ala Glu Asn Asp Leu Pro Glu Met Ala Glu Arg Phe Gly Pro Arg
 65 70 75 80
 Ile Ala Phe Ala His Leu Arg Ala Thr Lys Arg Asp Ala Asp Gly Leu
 85 90 95
 Ser Phe His Glu Ser Asp His Leu Asp Gly Asp Val Asp Met Val Ala
 100 105 110
 Cys

<210> 1059

<211> 372

<212> DNA

<213> Homo sapiens

<400> 1059

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 120
 gccgacatcc tgatcgacga aggtttcacc ggtatcgagg aaatgccta cgtcccatg
 180
 caggaactgc tggagatcga ggcgttcgac gaagacacca tcaacgagtt gcgcgcccgt
 240
 gcccgcgaatg cgctgctgac cgaggccatc gccaggaag agcgccttga gaccgcgcag
 300
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 360
 gtgcgtacgc gt
 372

<210> 1060

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1060

Xaa Leu Thr Gly Trp Gln Ile Asn Ile Met Thr Pro Glu Glu Ser Val
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 Asn Arg Arg Glu Val Glu Arg Ser Gly Leu Arg Thr Thr Phe Met Asn
 20 25 30
 Lys Leu Asp Val Asp Glu Glu Val Ala Asp Ile Leu Ile Asp Glu Gly
 35 40 45
 Phe Thr Gly Ile Glu Glu Ile Ala Tyr Val Pro Met Gln Glu Leu Leu
 50 55 60
 Glu Ile Glu Ala Phe Asp Glu Asp Thr Ile Asn Glu Leu Arg Ala Arg

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65              70              75              80
Ala Arg Asn Ala Leu Leu Thr Glu Ala Ile Ala Gln Glu Glu Arg Leu
              85              90              95
Glu Thr Ala Gln Asp Leu Leu Glu Leu Glu Gly Val Thr Pro Glu Leu
              100              105              110
Ala Ala Lys Leu Ala Glu Arg Gln Val Arg Thr Arg
              115              120

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<210> 1061
 <211> 456
 <212> DNA
 <213> Homo sapiens

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<400> 1061
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120
gagaaggagg attctggagc attgtatttg gcagccggag cgggcagtgg gcgggggggtt
180
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240
cttcgcagcg accctcgggg gtccatggag ccgcctgcct tcgccccctc gctcttccca
300
ggtctgaacc tggatgggga gaagaaattg aagtgttttg gagacggggg ggcttaaaac
360
actagggagc ctcacgcgcc agccttgggc ccactttcct ttcgatcgtg aggattccgc
420
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456

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<210> 1062
 <211> 125
 <212> PRT
 <213> Homo sapiens

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<400> 1062
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Phe Leu Leu Pro Ile Gln Val Gln Thr Trp Glu Glu Arg Gly Gly Glu
20     25     30
Gly Arg Arg Leu His Gly Pro Pro Arg Val Ala Ala Lys Pro Val Phe
35     40     45
Ser Pro Leu Gly Gln Lys Arg His Arg Gly Pro Lys Ser Pro Ser Cys
50     55     60
Pro Asn Pro Pro Pro Thr Ala Arg Ser Gly Cys Gln Ile Gln Cys Ser
65     70     75     80
Arg Ile Leu Leu Leu Leu Ser Ala Pro Lys His Leu Gln Pro Leu Leu
85     90     95
Gly Leu Gln Lys Gly Phe Leu Glu Gly Ala Lys Gly Thr Phe Tyr Leu
100    105    110
Ser Tyr Leu Pro Ala Gln Pro Gly Ala Met Glu Ser Arg
115    120    125

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<210> 1063
<211> 3760
<212> DNA
<213> Homo sapiens

<400> 1063
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120
taaggtctta taactagtaa atatctgcat taaagaacga gttgaatgaa aattctgata
180
aattcctact taaagtgtat ccaaagaaaa cggaaaaagt ctaggagtta gtgatattag
240
attcagaaga atgagctttg taattcttaa aaattagtct cagaatagaa aggattttaa
300
aagtaattga gtaaagtcag aggaaatgtg accatataaa ggaatggctc taaatgtatt
360
aatccagaag gaagcaacag gttaaacagt aagaggtgag aaacaaaaaa taaggaaacga
420
gagagagaga gtgacaggga gagagagaca gagcggggaa ggagagaatg agaaggaaaa
480
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540
tgaatcaatt taagaattgc catgtctaata tcttatatgg aagatttgaa atacaaggat
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660
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720
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780
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1020
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1140
aaaatcccaa tgcagtgagg actttccagt tggagaagag gcactgatgg ggaggcaagg
1200
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1440

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2160
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2280
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2760
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3060

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 3600
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 3660
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 3760

<210> 1064

<211> 483

<212> PRT

<213> Homo sapiens

<400> 1064

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His	Gly	Ser	Pro	Ser	Cys	Thr	Leu	Arg	Arg	Ser	Ala	Val	Lys	Ser	Arg
			20					25					30		
Leu	Gly	Cys	Ala	Val	Ala	Gly	Ser	Ser	Phe	Thr	Ser	Thr	Trp	Asn	Phe
		35					40					45			
Leu	Lys	Ser	Ser	Leu	Leu	Pro	Gly	Met	Gln	His	Ala	Val	Phe	Ser	Ser
	50				55					60					
Met	Gly	Met	Phe	Ser	Ala	Ser	Ser	Leu	Val	Thr	Ala	Leu	Leu	Leu	Leu
65					70					75					80
Arg	Thr	Pro	Leu	Thr	Pro	Ser	Ser	Arg	Pro	Arg	Ala	Gly	Arg	Trp	His
				85					90					95	
Leu	Ser	Cys	Ser	Ser	Ser	Ala	Ser	Ser	Phe	Arg	Ala	Leu	Leu	Cys	Trp
		100					105						110		
Thr	Ser	Arg	Leu	Leu	Leu	Ser	Arg	Ser	Leu	Cys	Ser	Val	Ala	Arg	Ser
		115				120					125				
Ser	Ala	Ser	Ser	Arg	Leu	Ser	Tyr	Gln	Val	Lys	Leu	Gln	Met	Ala	Leu
	130					135					140				
Glu	Leu	Met	Arg	Lys	Glu	Leu	Glu	Asp	Ala	Leu	Thr	Gln	Glu	Ala	Asn
145				150						155					160
Val	Gly	Lys	Lys	Thr	Val	Ile	Trp	Lys	Glu	Lys	Val	Glu	Met	Gln	Arg
				165					170					175	
Gln	Arg	Phe	Arg	Leu	Glu	Phe	Glu	Lys	His	Arg	Gly	Phe	Leu	Ala	Gln

```

      180      185      190
Glu Glu Gln Arg Gln Leu Arg Arg Leu Glu Ala Glu Glu Arg Ala Thr
      195      200      205
Leu Gln Arg Leu Arg Glu Ser Lys Ser Arg Leu Val Gln Gln Ser Lys
      210      215      220
Ala Leu Lys Glu Leu Ala Asp Glu Leu Gln Glu Arg Cys Gln Arg Pro
225      230      235      240
Ala Leu Gly Leu Leu Glu Gly Val Arg Gly Val Leu Ser Arg Ser Lys
      245      250      255
Ala Val Thr Arg Leu Glu Ala Glu Asn Ile Pro Met Glu Leu Lys Thr
      260      265      270
Ala Cys Cys Ile Pro Gly Arg Arg Glu Leu Leu Arg Lys Phe Gln Val
      275      280      285
Asp Val Lys Leu Asp Pro Ala Thr Ala His Pro Ser Leu Leu Leu Thr
      290      295      300
Ala Asp Leu Arg Ser Val Gln Asp Gly Glu Pro Trp Arg Asp Val Pro
305      310      315      320
Asn Asn Pro Glu Arg Phe Asp Thr Trp Pro Cys Ile Leu Gly Leu Gln
      325      330      335
Ser Phe Ser Ser Gly Arg His Tyr Trp Glu Val Leu Val Gly Glu Gly
      340      345      350
Ala Glu Trp Gly Leu Gly Val Cys Gln Asp Thr Leu Pro Arg Lys Gly
      355      360      365
Glu Thr Met Pro Ser Pro Glu Asn Gly Val Trp Ala Leu Trp Leu Leu
      370      375      380
Lys Gly Asn Glu Tyr Met Val Leu Ala Ser Pro Ser Val Pro Leu Leu
385      390      395      400
Gln Leu Glu Ser Pro Arg Cys Ile Gly Ile Phe Leu Asp Tyr Glu Ala
      405      410      415
Gly Glu Ile Ser Phe Tyr Asn Val Thr Asp Gly Ser Tyr Ile Tyr Thr
      420      425      430
Phe Asn Gln Leu Phe Ser Gly Leu Leu Arg Pro Tyr Phe Phe Ile Cys
      435      440      445
Asp Ala Thr Pro Leu Ile Leu Pro Pro Thr Thr Ile Ala Gly Ser Gly
      450      455      460
Asn Trp Ala Ser Arg Asp His Leu Asp Pro Ala Ser Asp Val Arg Asp
465      470      475      480
Asp His Leu

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<210> 1065

<211> 892

<212> DNA

<213> Homo sapiens

<400> 1065

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120
ttgtccagtc tggaaggggg gaagaagaga tgaggggaag gctgtccagg ggggtgcaag
180
gccctagaga cccagcagag aagggaactct ggccactgaa ggggccctcc cattgtggct
240

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ctggttccct agagcagctc cagcttcttg gcctcccccg tctgatgctt agtcatccc
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 360
 caccagagc agcatcaaga tgcagttggc ggggtactgg aactggcttg gcaagggctg
 420
 cgcaggcaac aggtcccagc aagagtcagc tagcctagct cagccctgca cacctggaga
 480
 cctgggggtg ctccagacac ctcgccctt taggtccctt taattgaatg tgtgtggatc
 540
 agtgaagggt gaggaatcat ttctctatgg cccaagacgt ttctctctgc agttgtcatg
 600
 ttagtacctg ccagcttttc ctctcttaca taaatttcat gccagagcct ggaaatgtgt
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 gccctttgta ggaggggcat cacaggctgg ctcacctcag cagtgccagg cagagcccg
 720
 ccctctcatt gcaggaggcg catgaagcgt gtctgggacc gagctgtgga gttcctggcc
 780
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 892

<210> 1066

<211> 76

<212> PRT

<213> Homo sapiens

<400> 1066

Met	Cys	Ala	Leu	Cys	Arg	Arg	Gly	Ile	Thr	Gly	Trp	Leu	Thr	Ser	Ala
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Val	Pro	Gly	Arg	Ala	Arg	Pro	Ser	His	Cys	Arg	Arg	Arg	Met	Lys	Arg
			20					25					30		
Val	Trp	Asp	Arg	Ala	Val	Glu	Phe	Leu	Ala	Ser	Asn	Glu	Ser	Arg	Ile
		35					40					45			
Gln	Thr	Glu	Ser	His	Arg	Val	Ala	Gly	Glu	Asp	Met	Leu	Val	Leu	Arg
	50					55					60				
Trp	Thr	Lys	Pro	Ser	Ser	Phe	Ser	Asp	Ser	Glu	Arg				
65					70					75					

<210> 1067

<211> 418

<212> DNA

<213> Homo sapiens

<400> 1067

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 120
 ggactagaca tctggaaagc ccgagtctcc gctgacatcg aaggcgactg gactatgcac
 180
 gttgaaggct ggtcagacac ctggggcacg tggcatcaca atgccaatgc caagctcgcc
 240

gctgccatcg acgtcgaaact ggtgtgccc gaaggccatg ccctcataaa cgaggcggtc
 300
 cggcacgccc agcaatccgg ggatactgac gcgatcacgg ctctgcccga gaccgatgcc
 360
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 418

<210> 1068
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1068
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 Gly Ala Ser Val Val Leu Thr Asp Pro Glu Gly Asn Arg His Leu Thr
 20 25 30
 Asp Met His Gln Val Glu Pro Trp Gly Leu Asp Ile Trp Lys Ala Arg
 35 40 45
 Val Ser Ala Asp Ile Glu Gly Asp Trp Thr Met His Val Glu Gly Trp
 50 55 60
 Ser Asp Thr Trp Gly Thr Trp His His Asn Ala Asn Ala Lys Leu Ala
 65 70 75 80
 Ala Ala Ile Asp Val Glu Leu Val Cys Ala Glu Gly His Ala Leu Ile
 85 90 95
 Asn Glu Ala Val Arg His Ala Glu Gln Ser Gly Asp Thr Asp Ala Ile
 100 105 110
 Thr Ala Leu Arg Glu Thr Asp Ala Asn Leu Thr Leu Asp Arg Ala Pro
 115 120 125
 Asp Ser Leu Gln Gln Val Ile Asn Thr Tyr Ala
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<210> 1069
 <211> 371
 <212> DNA
 <213> Homo sapiens

<400> 1069
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 120
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 180
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 240
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 371

<210> 1070

<211> 123
 <212> PRT
 <213> Homo sapiens

<400> 1070
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 Asn Ser Lys Gly Ile Ala Cys Ser Phe Ser Gly Ala Glu His Leu Arg
 35 40 45
 Cys His Val Arg Leu Gly Ala Ser His Gly Gly Asp Leu Arg Tyr His
 50 55 60
 Leu Gln Gln Asn Val His Phe Lys Glu Glu Thr Val Lys Leu Phe Ile
 65 70 75 80
 Cys Glu Leu Val Met Ala Leu Asp Tyr Leu Gln Asn Gln Arg Ile Ile
 85 90 95
 His Arg Asp Met Lys Pro Asp Asn Ile Leu Leu Asp Glu His Gly His
 100 105 110
 Val His Ile Thr Asp Phe Asn Ile Ala Ala Met
 115 120

<210> 1071
 <211> 998
 <212> DNA
 <213> Homo sapiens

<400> 1071
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 998

<210> 1072
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 1072
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 20 25 30
 Ala Asp Cys Ala Lys Thr Leu His Leu Val Ala Ala Thr Arg Gly Ala
 35 40 45
 Ile Asn Gly Leu Met Asp Glu Ile Ile Glu Asp His Ala Arg Lys His
 50 55 60
 Val Ala Ser Pro Thr Leu Ser Asp
 65 70

<210> 1073
 <211> 468
 <212> DNA
 <213> Homo sapiens

<400> 1073
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 120
 ttccccact gataaaatct tgcttctctt caaactccta ggcaaatttc tcctacttca
 180
 gaaagtcttg tttctccata tccttcgtaa ccaccacctg gtgcacatgc tgaaggcaga
 240
 attcattgtc tcctctcctt cactctcgaa tagctttgcc cagaccctca ggtactcctt
 300
 catcctctgt ataatatattg gttttcacct ctttatgaac tcttttgat tctcattact
 360
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 420
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 468

<210> 1074
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 1074

Met Asp Asn Phe Leu Phe Phe Lys Tyr Thr Leu Pro Met Ser Gln Leu
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 Gly Cys Phe Ser Pro Thr Asp Lys Ile Leu Leu Leu Phe Lys Leu Leu
 20 25 30
 Gly Lys Phe Leu Leu Leu Gln Lys Val Leu Phe Leu His Ile Leu Arg
 35 40 45
 Asn His His Leu Val His Met Leu Lys Ala Glu Phe Ile Val Ser Ser
 50 55 60
 Pro Ser Leu Ser Asn Ser Phe Ala Gln Thr Leu Arg Tyr Ser Phe Ile
 65 70 75 80
 Leu Cys Ile Ile Phe Gly Phe His Leu Phe Met Asn Ser Phe Val Phe
 85 90 95
 Ser Leu Leu Ala Leu Glu Pro Arg Thr Tyr His Gly Phe Lys Val Cys
 100 105 110
 Phe Asn Glu Leu Asn Gly Ile Asn Phe Val Val Leu Met Gln Ile Gln
 115 120 125
 Met Pro Leu Asn Thr Asp
 130

<210> 1075

<211> 1633

<212> DNA

<213> Homo sapiens

<400> 1075

gcgcgccagg gatgagtccc agtacttccg ctttcatgct gacgaggaga tggaggggac
 60
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 120
 gcgcctgctg atcctgcccc aggaggagga ctatggcttt gacatcgagg agaagaacaa
 180
 ggctgtggtg gtgaagtccg tccagagggg cttgctggct gaggtggctg gcctgcaggt
 240
 ggggaggaag atctactcca tcaatgagga cctgggtgttc ctgcggccgt ttctcagaggt
 300
 ggagtccatc ctcaaccagt cttctgctc ccgccgccct ctgcgcctcc tggtagccac
 360
 gaaggccaaa gagatcatca aaatccccga ccagccggac aactgtgtct tccagattcg
 420
 tggagctgcc ccaccgtacg tctatgctgt ggggagaggc tctgaggcca tggctgcagg
 480
 gctctgtgct ggtcagtga ttctgaaggt caatggcagc aacgtgatga acgatggtgc
 540
 ccctgaggctc ctggagcact tccaggcatt ccggagtcgg cgcaagagg ccctgggcct
 600
 gtaccagtgg atctaccaca cccatgagga tgcccaggaa gcacgagcca gtcaggaggc
 660
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 720
 cccactgctg tccctgggtc cccggctgag cctgtgtgag ggcagcccca tggtcaccc
 780
 gactgtggac aacgtgcacc tggaacacgg cgtggtgtat gagtatgtga gcacggcagg
 840

cgtcaggtgc catgtgctgg agaagatcgt ggagccccgc ggctgcttcg gcctcaccgc
 900
 caagatcctc gaggcctttg ctgccaatga cagcgtcttc gtggagaact gcaggcggct
 960
 catggccctg agcagcgcca tcgtgaccat gccccacttt gagttccgca acatctgtga
 1020
 caccaagctg gagagcattg gccagaggat tgcctgctac caggagtttg cagcccaact
 1080
 gaagagcagg gtcagccac ccttcaaaca agccccctg gagccccacc cgctgtgtgg
 1140
 cctacttctg cccaccaat tgccacatca acctcatgga agtgtcctac cccaagacca
 1200
 cccctcagt gggcaggtcc ttcagcatcc gctttggacg caaacctcc ctcatcgcc
 1260
 ttgaccgga gcaaggccac ctgaacccca tgcgtacac ccagcactgc atcaccacca
 1320
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 1380
 tccatgatgg cagcttcggg ccagccagtg ggacccttg tcaggaagac cggggcctca
 1440
 gcttcctact caagcaggag gaccgtgaga tccaggatgc ctacctgag ctcttcacca
 1500
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 1560
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 1620
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 1633

<210> 1076

<211> 87

<212> PRT

<213> Homo sapiens

<400> 1076

His	Gln	Ala	Gly	Glu	His	Trp	Pro	Glu	Asp	Cys	Leu	Leu	Pro	Gly	Val
1				5					10					15	
Cys	Ser	Pro	Thr	Glu	Glu	Gln	Gly	Gln	Pro	Thr	Leu	Gln	Thr	Ser	Pro
		20						25					30		
Pro	Gly	Ala	Pro	Pro	Ala	Val	Trp	Pro	Thr	Ser	Ala	Pro	Pro	Ile	Ala
		35					40					45			
Thr	Ser	Thr	Ser	Trp	Lys	Cys	Pro	Thr	Pro	Arg	Pro	Pro	Pro	Gln	Trp
	50					55				60					
Ala	Gly	Pro	Ser	Ala	Ser	Ala	Leu	Asp	Ala	Asn	Pro	Pro	Ser	Ser	Ala
65					70				75					80	
Leu	Thr	Arg	Ser	Lys	Ala	Thr									
				85											

<210> 1077

<211> 419

<212> DNA

<213> Homo sapiens

<400> 1077

nnacgcgtaa cgcgccctgc gacgcgcctc cacagcatgt cgaccaagtg gacgtgcaat
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 120
 caccagagt ttacatatcc aatttttggga gaggtgagg caatttacgg ctacaacggc
 180
 ttgcacatga atcttgctt tgcgagcggc agcctggtgc cgtcgctcga aatcacttac
 240
 cgcgctaaga atacgacgac gtccgctaaa gtagatgacg tggagcaggc tctgcgcgga
 300
 gtgctcccgc cagatgtcgt tactcctgca gaacttgatg ctatcgttgc acgcgacgcc
 360
 agggcggtcc gggcgcattht acgccgcggg gcaccaagat tgcgacgtac actcgcgcg
 419

<210> 1078

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1078

Xaa	Arg	Val	Thr	Arg	Leu	Ala	Thr	Arg	Leu	His	Ser	Met	Ser	Thr	Lys
1				5					10					15	
Trp	Thr	Cys	Asn	Ala	Asn	Glu	Ala	Thr	Cys	Leu	Arg	Leu	Ala	Gly	Ala
			20					25					30		
Pro	Ser	Pro	Ser	Asp	Ala	Leu	Phe	His	Pro	Glu	Phe	Thr	Tyr	Pro	Ile
			35				40					45			
Phe	Gly	Glu	Ala	Glu	Ala	Ile	Tyr	Gly	Tyr	Asn	Gly	Leu	His	Met	Asn
	50					55				60					
Leu	Ala	Phe	Ala	Ser	Gly	Ser	Leu	Val	Pro	Ser	Leu	Glu	Ile	Thr	Tyr
65					70					75				80	
Arg	Ala	Lys	Asn	Thr	Thr	Thr	Ser	Ala	Lys	Val	Asp	Asp	Val	Glu	Gln
			85						90					95	
Ala	Leu	Arg	Gly	Val	Leu	Pro	Pro	Asp	Val	Val	Thr	Pro	Ala	Glu	Leu
			100					105					110		
Asp	Ala	Ile	Val	Ala	Arg	Asp	Ala	Arg	Ala	Val	Arg	Ala	His	Leu	Arg
		115					120					125			
Arg	Arg	Ala	Pro	Arg	Leu	Arg	Thr	Leu	Ala						
		130				135									

<210> 1079

<211> 584

<212> DNA

<213> Homo sapiens

<400> 1079

acgcgtgaag ggtctgcagc ctgtacaact cagacatgct tcacgtgggtc tcagccagtc
 60
 agccttgagg aatgtacccc catgctgtgg catctacaat cggcctcctg ttcttactct
 120
 gctcaaactg cttcccaagc cagcagggag gggaaccatg ctgcctgctg acctgggtag
 180
 ttctatttag gtcttgtgac acaacagtgg gcaaggtgat gccctctgtg accaaaagta
 240

tttaccccaa gttccccag gccctccctt tcgtctgcaa agacacacat ctgtttcact
 300
 gtgtcttctg caaagacaca catctgtttc actgggggtt tctgcaaaga caccatttg
 360
 tttccctttt taagggtttt cccctccatc ttgtctattt ttaaaaaaat aaaccgggtt
 420
 cccaggatag ccttcccccc cagatcaaga gcccatgtga aatgaggggg ccgacttgac
 480
 cacagcacct tggtcctttc tgtaatctag acattctgc acaatagagg gccacccct
 540
 caagggcaca ggccatgggt tgctctcagg ctccctccac gcgt
 584

<210> 1080
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 1080
 Met Leu His Val Val Ser Ala Ser Gln Pro Trp Glu Met Tyr Pro His
 1 5 10 15
 Ala Val Ala Ser Thr Ile Gly Leu Leu Phe Leu Leu Cys Ser Asn Cys
 20 25 30
 Phe Pro Ser Gln Gln Gly Gly Glu Pro Cys Cys Leu Leu Thr Trp Val
 35 40 45
 Val Leu Phe Arg Ser Cys Asp Thr Thr Val Gly Lys Val Met Pro Ser
 50 55 60
 Val Thr Lys Ser Ile Tyr Pro Lys Phe Pro Gln Ala Leu Pro Phe Val
 65 70 75 80
 Cys Lys Asp Thr His Leu Phe His Cys Val Phe Cys Lys Asp Thr His
 85 90 95
 Leu Phe His Trp Gly Phe Leu Gln Arg His Pro Phe Val Ser Pro Phe
 100 105 110
 Lys Gly Phe Pro Leu His Leu Val Tyr Phe
 115 120

<210> 1081
 <211> 3077
 <212> DNA
 <213> Homo sapiens

<400> 1081
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 gttcttaaac tgaacaagca tatcaaagag aatcataaaa acattccctt ggccctgaat
 120
 tatatccaca atgggaagaa atccagggcc ttaagccccc tatctctgtt ggccatagag
 180
 cagacatctc ttaagatgat gcaggcagta ggaggtgcac ctgcacgtcc cactggagaa
 240
 tatatctgta atcaatgtgg tgctaagtac acatccctag acagctttca gactcaccta
 300
 aaaactcatc tcgacactgt gtttccaaaa ttgacctgtc ctcaagtcaa caaggaattc
 360

cccaaccaag aatccttgct gaagcatggt accattcact ttatgatcac ttcaacgtat
420
tacatctgtg agagttgtga caagcaattc acatcagtgg atgaccttca gaaacacctg
480
ctggacatgc acacctttgt cttctttcgc tgcacctct gccaggaagt ttttgactca
540
aaagtctcca ttcagctcca cttggctgtg aagcacagta acgaaaagaa agtctatagg
600
tgcacatctt gcaactggga cttccgcaac gaaactgact tgcagctcca tgtgaaacac
660
aaccacctgg aaaaccaagg gaaagtgcac aagtgcattt tctgcggtga gtcctttggc
720
accgaggtgg agctgcaatg ccacatcacc actcacagta agaagtacaa ctgcaagttc
780
tgtagcaaag ccttccatgc gatcattttg ttagaaaaac acttgcgaga aaaacactgt
840
gtattcgaaa ccaagacacc caactgtgga acaaatggag cttccgagca agtgcagaaa
900 agctgcagac tttgctgacc aacagccagg agtcccacaa cagtcacgat 960
gggagcgaag aagacgttga cacctctgag cctatgtacg gctgcgacat ttgtggggca
1020
gcctacacta tggaaacttt gctgcagaat caccagctcc gagaccacaa catcagacct
1080
ggagaaagtg ccatcgtgaa aaagaaagct gagctcatta aagggaaatta caagtgcagc
1140
gtgtgctctc gaaccttctt ctccgaaaat ggctccggg aacatatgca gacctaccta
1200
ggccctgtca aacactacat gtgccctatt tgcggagagc ggtttccctc ctttttaact
1260
cttactgaac acaaagtcac gcatagtaag agtcttgata ctggaaactg ccggatttgc
1320
aagatgcctc tccagagtga agaggagtct ttagagcatt gccaaatgca ccctgacttg
1380
aggaattccc tgacaggctt tcgctgcgtg gtgtgcatgc agacagtgc ctccaccttg
1440
gaactcaaaa tccatgggac gttccacatg caaaagacag ggaatgggtc tgcagttcag
1500
accacagggc ggggccagca cgtccaaaaa ctgtataagt gcgcatcttg cctcaaagaa
1560
ttccgttcca agcaagatct ggtgaaactt gatatcaatg gcctgccata tgggtctgtg
1620
gccggctgct tgaatctcag taagagcgcc agcccaggca ttaacgtccc tcccggcacg
1680
aatagaccag gcttggggca gaatgagaat ctgagtgcc a ttggggaaag gcaagggtgg
1740
gggactgaaa cacgctgctc tagctgcaac gttaagtttg agtctgaaag tgaactccag
1800
aaccacatcc aaaccatcca ccgagagctc gtgccagaca gcaacagcac acagttgaaa
1860
acgccccaa g tatcaccaat gcccagaatc agtccctccc agtcggatga gaagaagacc
1920
tatcaatgca tcaagtgtca gatggttttc tacaatgaat gggatattca gggtcatggt
1980
gcaaatcaca tgattgatga aggactgaac catgaatgca aactctgcag ccagaccttt
2040

gactctcctg ccaaactcca gtgccacctg atagagcaca gcttcgaagg gatgggagggc
 2100
 accttcaagt gtccagtctg ctttacagta tttgttcaag caaacaagtt gcagcagcat
 2160
 attttctctg cccatggaca agaagacaag atctatgact gtacacaatg tccacagaag
 2220
 tttttcttcc aaacagagct gcagaatcat acaatgaccc aacacagcag ttagtgcaag
 2280
 tacagtctct caaggagaat tgattttgtg gcacaaaaag ggaacatggt ttactctttg
 2340
 cagaaaactt tcattgttaa tgtatattat tcagaaacat tgtattgtac cataaaactt
 2400
 gtattatcaa actgttggtg gttcatgtgt ttgaactttt gcgcaccgga tagaccctt
 2460
 gtatataaag tgttgacat gtattatgtc gtctgatact aaaatggtct tataaagaca
 2520
 agtggacttg ggccctattc aggcaagatt aaaaaaaaaa aaaagactat gaccaaaatg
 2580
 gcttaagata aagtattttt aaggaagaaa gattaaaaac aactggtata catgagacta
 2640
 tggttggact tccttttctt tacacttaag cctagaattt ctcttttaggt atatcagcgc
 2700
 ttaaattcaa gactattttt tattgctgaa gattcttgca aaccatgaag agatgttctc
 2760
 acagaacaga accccacagc tggataaggc ccgtatatat atatttgtaa gccttgcaat
 2820
 gtgacaggta gcatactat atatgcaata gttgttatgt agactgtcaa agaatttttt
 2880
 tttccctgga tacatttgaa gctttgagtg ttcaagggtt tccttaatga tttcacgcag
 2940
 ccaaattctt gaatcagttg aactaacctg tatgttactg ttattaatgt ttactctgca
 3000
 gtctgaacct ggagattact ggaattgttt tccaagagga aataaattca gtttaccatt
 3060
 aggaaaaaaaa aaaaaaa
 3077

<210> 1082
 <211> 757
 <212> PRT
 <213> Homo sapiens

<400> 1082
 Xaa Pro Val Val Glu Val Tyr Ser Cys Ser Tyr Cys Thr Asn Ser Pro
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 Ile Phe Asn Ser Val Leu Lys Leu Asn Lys His Ile Lys Glu Asn His
 20 25 30
 Lys Asn Ile Pro Leu Ala Leu Asn Tyr Ile His Asn Gly Lys Lys Ser
 35 40 45
 Arg Ala Leu Ser Pro Leu Ser Pro Val Ala Ile Glu Gln Thr Ser Leu
 50 55 60
 Lys Met Met Gln Ala Val Gly Gly Ala Pro Ala Arg Pro Thr Gly Glu
 65 70 75 80
 Tyr Ile Cys Asn Gln Cys Gly Ala Lys Tyr Thr Ser Leu Asp Ser Phe

1017

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      515              520              525
Lys Leu Asp Ile Asn Gly Leu Pro Tyr Gly Leu Cys Ala Gly Cys Val
  530              535              540
Asn Leu Ser Lys Ser Ala Ser Pro Gly Ile Asn Val Pro Pro Gly Thr
545              550              555              560
Asn Arg Pro Gly Leu Gly Gln Asn Glu Asn Leu Ser Ala Ile Gly Glu
              565              570              575
Arg Gln Gly Gly Gly Thr Glu Thr Arg Cys Ser Ser Cys Asn Val Lys
              580              585              590
Phe Glu Ser Glu Ser Glu Leu Gln Asn His Ile Gln Thr Ile His Arg
              595              600              605
Glu Leu Val Pro Asp Ser Asn Ser Thr Gln Leu Lys Thr Pro Gln Val
  610              615              620
Ser Pro Met Pro Arg Ile Ser Pro Ser Gln Ser Asp Glu Lys Lys Thr
625              630              635              640
Tyr Gln Cys Ile Lys Cys Gln Met Val Phe Tyr Asn Glu Trp Asp Ile
              645              650              655
Gln Val His Val Ala Asn His Met Ile Asp Glu Gly Leu Asn His Glu
              660              665              670
Cys Lys Leu Cys Ser Gln Thr Phe Asp Ser Pro Ala Lys Leu Gln Cys
              675              680              685
His Leu Ile Glu His Ser Phe Glu Gly Met Gly Gly Thr Phe Lys Cys
  690              695              700
Pro Val Cys Phe Thr Val Phe Val Gln Ala Asn Lys Leu Gln Gln His
705              710              715              720
Ile Phe Ser Ala His Gly Gln Glu Asp Lys Ile Tyr Asp Cys Thr Gln
              725              730              735
Cys Pro Gln Lys Phe Phe Phe Gln Thr Glu Leu Gln Asn His Thr Met
              740              745              750
Thr Gln His Ser Ser
              755

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<210> 1083
 <211> 516
 <212> DNA
 <213> Homo sapiens

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<400> 1083
naccggtgag gcattctctgc aggggtgtccg gctagctaag cagagcggct ggaaggctcc
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agatccgaat aacctgcccc ctcccgtctga gcccgaggaa gaggagaaga agtgaccgat
120
ccactgaccc cggttctgtc ggccaattgg gatgaagagc gcagttggaa gctgcttaac
180
tacgagcgac agggcggata caccggcctt cgtaaggctt tgacgatgcc gcctgacgac
240
gttgtctcgc tggtaagga cgtaacctg cgtggcgtg gtggcgccgg gttccccacc
300
ggcatgaagt ggtccttcgt gcctaaggac aatcccaacc cgacctacct cgttgtcaac
360
ggcgacgagt ctgagccggg cacgtgcaag gacatgccgc tcatgatggc ctccccgcac
420
accctcgctg agggcgctcat cattgcctcc tacgccatca aggccaagat ggccttcac
480

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tacatccgcg gtgaggtgct gcacgtcgtc cgacgc
516

<210> 1084
<211> 142
<212> PRT
<213> Homo sapiens

<400> 1084
Ala Arg Gly Arg Gly Glu Glu Val Thr Asp Pro Leu Thr Pro Val Leu
1 5 10 15
Ser Ala Asn Trp Asp Glu Glu Arg Ser Trp Lys Leu Leu Asn Tyr Glu
20 25 30
Arg Gln Gly Gly Tyr Thr Gly Leu Arg Lys Ala Leu Thr Met Pro Pro
35 40 45
Asp Asp Val Val Ser Leu Val Lys Asp Ala Asn Leu Arg Gly Arg Gly
50 55 60
Gly Ala Gly Phe Pro Thr Gly Met Lys Trp Ser Phe Val Pro Lys Asp
65 70 75 80
Asn Pro Asn Pro Thr Tyr Leu Val Val Asn Gly Asp Glu Ser Glu Pro
85 90 95
Gly Thr Cys Lys Asp Met Pro Leu Met Met Ala Ser Pro His Thr Leu
100 105 110
Val Glu Gly Val Ile Ile Ala Ser Tyr Ala Ile Lys Ala Lys Met Ala
115 120 125
Phe Ile Tyr Ile Arg Gly Glu Val Leu His Val Val Arg Arg
130 135 140

<210> 1085
<211> 374
<212> DNA
<213> Homo sapiens

<400> 1085
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aaatcgtaga gtgtctctga gctgcctagg gggctggttg cgatcttgcg gacagtgtct
120
atatccacaa gggtcagctc cgccaggaga ctgtcgccga tcattttcag gaagttttct
180
ttgctgcgtt cgtagtcttg gtgcaggctg aagctgtagt cgcttttgta gatgtcccg
240
tagaagaact cgggcagggt gcctttcatg gcttccagga tgacggggtt gctcatcccg
300
tgcccgctca gaacacccgg gtacaccagg gaagagcgga tcatgtcgtc ctcaaggtag
360
ggggcggcga attc
374

<210> 1086
<211> 110
<212> PRT
<213> Homo sapiens

<400> 1086

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Met Ile Arg Ser Ser Leu Val Tyr Pro Gly Val Leu Ser Gly His Gly
 1           5           10           15
Met Ser Lys Pro Val Ile Leu Glu Ala Met Lys Gly Thr Leu Pro Glu
          20           25           30
Phe Phe Tyr Arg Asp Ile Tyr Lys Ser Asp Tyr Ser Phe Asp Leu His
          35           40           45
Gln Asp Tyr Glu Arg Ser Lys Glu Asn Phe Leu Lys Met Ile Gly Asp
          50           55           60
Ser Leu Leu Ala Glu Leu Asn Leu Val Asp Ile Asp Thr Val Arg Lys
65           70           75           80
Ile Ala Asn Ser Pro Leu Gly Ser Ser Glu Thr Leu Tyr Asp Phe Glu
          85           90           95
Arg Met Thr His Met Glu Val Trp Leu Arg Glu Asn Tyr Val
          100          105          110

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<210> 1087

<211> 423

<212> DNA

<213> Homo sapiens

<400> 1087

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atgacgatcg tggccccacc accgccgacc gcgggcgccg ccattagctt ccttgtcgac
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ggcatccacc cgcacgacct cggccaggtc ctgcacgacc acggcgtgag catccgggtg
120
nggcaccact gtgcctggcc catccaccgg agtctagggg tgcaatccac cgcccgtgca
180
tcgttctact tctacaacac tttcccggaa gtggatgcgt tagcgtcggc ggtgcggggc
240
gcccggaat ttttcggagt gcattaggat tggctctgaac gtgaaccttg aatccatgta
300
ccaggaagtc atcctggacc actacaagaa tcccacgcac gcagggttga aggtccctt
360
tgatgccgaa gtgcaccatg tgaaccttc ctgcggtgac ganaccgtct ccgggtgaag
420
ctt
423

```

<210> 1088

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1088

```

Met Thr Ile Val Ala Pro Pro Pro Thr Ala Gly Ala Ala Ile Ser
 1           5           10           15
Phe Leu Val Asp Gly Ile His Pro His Asp Leu Gly Gln Val Leu Asp
          20           25           30
Asp His Gly Val Ser Ile Arg Val Xaa His His Cys Ala Trp Pro Ile
          35           40           45
His Arg Ser Leu Gly Val Gln Ser Thr Ala Arg Ala Ser Phe Tyr Phe
          50           55           60
Tyr Asn Thr Phe Pro Glu Val Asp Ala Leu Ala Ser Ala Val Arg Ala

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<400> 1090															
Met	Val	Thr	Trp	Val	Glu	Leu	Lys	Gly	Arg	Leu	Thr	Gln	Glu	Met	Ala
1				5					10					15	
Cys	Glu	Asp	Lys	Thr	Lys	Gly	Gly	Arg	Val	Gly	Gln	Arg	Gln	Tyr	Ile
			20					25					30		
Arg	Val	Val	Arg	Met	Gly	Leu	Gly	Glu	Glu	Ala	Leu	Pro	Leu	Phe	Phe
			35				40					45			
Phe	Asn	Leu	Ala	Lys	Gly	Leu	Leu	Gly	Gln	Gly	His	Pro	Ser	Leu	Leu
	50					55					60				
Leu	Gly	Ala	Ser	Ile	Phe	Leu	His	Ser	Val	Lys	Asn	Gly	Gly	Val	Ile
65					70					75					80
Gln	Lys	Tyr	Pro	Pro	Tyr	Cys	Gln	Gly	Phe	Gly	Glu	Gly	Ser	Lys	Lys

85
Lys Leu Ala Trp Glu Asn Thr
100

90

95

<210> 1091
<211> 438
<212> DNA
<213> Homo sapiens

<400> 1091
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gcgattatta cggcttatat gaacgaagtg tatttggtc aagtaggtaa tgaggggctt
120
catggctttg cggaggcgag tcagcacttt tttggacgac ctttaaaaga acttaatatc
180
gacgagtttg ccttgtagt aggaatggtg aaagggcctt ctatttataa tcctgaacga
240
caccctaaac gtgctttatc acgcagaaat acggtattag caattttaaa aagccaagat
300
cgtttaaccg agtcggatta taatatttta cggaaacaac ccattcgctt ggcagataaa
360
caccaagaac gctcagtata tggggattat ttagatctag tctctatgca gttatcgca
420
gactttgatc gctgcatg
438

<210> 1092
<211> 146
<212> PRT
<213> Homo sapiens

<400> 1092
Thr Arg Lys Leu Thr Glu Val Val Met Ser Leu Leu Leu Glu Tyr His
1 5 10 15
Tyr Ser Lys Ser Ala Ile Ile Thr Ala Tyr Met Asn Glu Val Tyr Leu
20 25 30
Ala Gln Val Gly Asn Glu Gly Leu His Gly Phe Ala Glu Ala Ser Gln
35 40 45
His Phe Phe Gly Arg Pro Leu Lys Glu Leu Asn Ile Asp Glu Phe Ala
50 55 60
Leu Leu Val Gly Met Val Lys Gly Pro Ser Ile Tyr Asn Pro Glu Arg
65 70 75 80
His Pro Lys Arg Ala Leu Ser Arg Arg Asn Thr Val Leu Ala Ile Leu
85 90 95
Lys Ser Gln Asp Arg Leu Thr Glu Ser Asp Tyr Asn Ile Leu Arg Lys
100 105 110
Gln Pro Ile Arg Leu Ala Asp Lys His Gln Glu Arg Ser Val Tyr Gly
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Asp Tyr Leu Asp Leu Val Ser Met Gln Leu Ser Arg Asp Phe Asp Arg
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Cys Met
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<210> 1093
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 <212> DNA
 <213> Homo sapiens

<400> 1093
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<210> 1094
 <211> 117
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Val Arg Glu Leu Leu His Ala Ile Asp Leu Glu His Glu Ile Gly Arg
 50 55 60
 Leu Arg Glu Gln Ile Pro Gln Thr Asn Ser Glu Thr Lys Ile Lys Lys
 65 70 75 80
 Leu Ser Lys Arg Leu Lys Leu Met Glu Ala Phe Gln Gly Ser Gly Asn
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<210> 1095
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 <212> DNA
 <213> Homo sapiens

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 180

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 420
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 480
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<210> 1096

<211> 195

<212> PRT

<213> Homo sapiens

<400> 1096

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			20					25				30			
Gln	Leu	Arg	Gln	Gly	Ser	Ala	Gln	Ser	Gln	Arg	Gln	Ile	Arg	Gly	Glu
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Glu	Ile	Asp	Gly	Lys	Leu	Arg	Gln	Gly	Ser	Leu	Leu	Ser	Pro	Glu	Glu
	65				70				75					80	
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			85					90					95		
Ala	Ile	Glu	Tyr	Lys	Asn	Glu	Ala	Ile	Thr	Cys	Arg	Gln	Arg	Val	Leu
		100					105					110			
Arg	Ala	Ser	Ala	Ser	Leu	Leu	Ser	Gln	Cys	Glu	Met	Asn	Leu	Met	Ala
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Lys	Leu	Ser	Tyr	Leu	Ser	Ser	Ser	Glu	Thr	Arg	Ala	Leu	Leu	Cys	Lys
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Tyr	Phe	Asp	Lys	Val	Gly	Gln	Gln	Pro	Met	Ala	Pro	Pro	Ala	Pro	Pro
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His	Gly	Thr	Cys	Gly	Glu	Val	Ser	His	Gly	Ser	Cys	Ser	Ser	Gly	Tyr
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Pro	Val	Ser	Ser	Gln	Thr	Gly	Gly	Gln	Asn	Gln	Asp	Gln	Leu	Ile	Cys
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<210> 1097

<211> 5108

<212> DNA

<213> Homo sapiens

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<210> 1098
 <211> 1336
 <212> PRT
 <213> Homo sapiens

<400> 1098
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 Lys His Gly Leu Glu Lys Pro Ile Ser Phe Val Lys Asn Thr Gln Ser
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 Ser Ser Glu Glu Ala Arg Lys Leu Met Val Arg Leu Thr Arg His Thr
 35 40 45
 Gly Arg Lys Gln Pro Pro Val Ser Glu Ser His Trp Arg Thr Leu Leu
 50 55 60
 Gln Asp Met Leu Thr Met Gln Gln Asn Val Tyr Thr Cys Leu Asp Ser
 65 70 75 80
 Asp Ala Cys Tyr Glu Ile Phe Thr Glu Ser Leu Leu Cys Ser Ser Arg
 85 90 95
 Leu Glu Asn Ile His Leu Ala Gly Gln Met Met His Cys Ser Ala Cys
 100 105 110
 Ser Glu Asn Pro Pro Ala Gly Ile Ala His Lys Gly Lys Pro His Tyr
 115 120 125
 Arg Val Ser Tyr Glu Lys Ser Ile Asp Leu Val Leu Ala Ala Ser Arg
 130 135 140
 Glu Tyr Phe Asn Ser Ser Thr Asn Leu Thr Asp Ser Cys Met Asp Leu
 145 150 155 160
 Ala Arg Cys Cys Leu Gln Leu Ile Thr Asp Arg Pro Pro Ala Ile Gln
 165 170 175
 Glu Glu Leu Asp Leu Ile Gln Ala Val Gly Cys Leu Glu Glu Phe Gly
 180 185 190
 Val Lys Ile Leu Pro Leu Gln Val Arg Leu Cys Pro Asp Arg Ile Ser
 195 200 205
 Leu Ile Lys Glu Cys Ile Ser Gln Ser Pro Thr Cys Tyr Lys Gln Ser
 210 215 220
 Thr Lys Leu Leu Gly Leu Ala Glu Leu Leu Arg Val Ala Gly Glu Asn
 225 230 235 240
 Pro Glu Glu Arg Arg Gly Gln Val Leu Ile Leu Leu Val Glu Gln Ala
 245 250 255
 Leu Arg Phe His Asp Tyr Lys Ala Ala Ser Met His Cys Gln Glu Leu
 260 265 270
 Met Ala Thr Gly Tyr Pro Lys Ser Trp Asp Val Cys Ser Gln Leu Gly

1029

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His Glu Arg Leu Gln Tyr Tyr Phe Thr Leu Leu Glu Asn Cys Gly Cys
              725              730              735
Ala Asp Leu Gly Asn Cys Ala Ile Lys Pro Glu Thr His Ile Arg Leu
              740              745              750
Leu Lys Lys Phe Lys Val Val Ala Ser Gly Leu Asn Tyr Lys Lys Leu
              755              760              765
Thr Asp Glu Asn Met Ser Pro Leu Glu Ala Leu Glu Pro Val Leu Ser
              770              775              780
Ser Gln Asn Ile Leu Ser Ile Ser Lys Leu Val Pro Lys Ile Pro Glu
785              790              795              800
Lys Asp Gly Gln Met Leu Ser Pro Ser Ser Leu Tyr Thr Ile Trp Leu
              805              810              815
Gln Lys Leu Phe Trp Thr Gly Asp Pro His Leu Ile Lys Gln Val Pro
              820              825              830
Gly Ser Ser Pro Glu Trp Leu His Ala Tyr Asp Val Cys Met Lys Tyr
              835              840              845
Phe Asp Arg Leu His Pro Gly Asp Leu Ile Thr Val Val Asp Ala Val
              850              855              860
Thr Phe Ser Pro Lys Ala Val Thr Lys Leu Ser Val Glu Ala Arg Lys
865              870              875              880
Glu Met Thr Arg Lys Ala Ile Lys Thr Val Lys His Phe Ile Glu Lys
              885              890              895
Pro Arg Lys Arg Asn Ser Glu Asp Glu Ala Gln Glu Ala Lys Asp Ser
              900              905              910
Lys Val Thr Tyr Ala Asp Thr Leu Asn His Leu Glu Lys Ser Leu Ala
              915              920              925
His Leu Glu Thr Leu Ser His Ser Phe Ile Leu Ser Leu Lys Asn Ser
              930              935              940
Glu Gln Glu Thr Leu Gln Lys Tyr Ser His Leu Tyr Asp Leu Ser Arg
945              950              955              960
Ser Glu Lys Glu Lys Leu His Asp Glu Ala Val Ala Ile Cys Leu Asp
              965              970              975
Gly Gln Pro Leu Ala Met Ile Gln Gln Leu Leu Glu Val Ala Val Gly
              980              985              990
Pro Leu Asp Ile Ser Pro Lys Asp Ile Val Gln Ser Ala Ile Met Lys
              995              1000              1005
Ile Ile Ser Ala Leu Ser Gly Gly Ser Ala Asp Leu Gly Gly Pro Arg
              1010              1015              1020
Asp Pro Leu Lys Val Leu Glu Gly Val Val Ala Ala Val His Thr Ser
1025              1030              1035              1040
Val Asp Lys Gly Glu Glu Leu Val Ser Pro Glu Asp Leu Leu Glu Trp
              1045              1050              1055
Leu Arg Pro Phe Cys Ala Asp Asp Ala Trp Pro Val Arg Pro Arg Ile
              1060              1065              1070
His Val Leu Gln Ile Leu Gly Gln Ser Phe His Leu Thr Glu Glu Asp
              1075              1080              1085
Ser Lys Leu Leu Val Phe Phe Arg Thr Glu Ala Ile Leu Lys Ala Ser
              1090              1095              1100
Trp Pro Gln Arg Gln Val Asp Ile Ala Asp Ile Glu Asn Glu Glu Asn
1105              1110              1115              1120
Arg Tyr Cys Leu Phe Met Glu Leu Leu Glu Ser Ser His His Glu Ala
              1125              1130              1135
Glu Phe Gln His Leu Val Leu Leu Leu Gln Ala Trp Pro Pro Met Lys

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Met Leu Thr Arg Cys Thr Met Glu Asn Lys Glu Gly Leu Gly Asn Glu
          1170          1175          1180
Val Leu Lys Met Cys Arg Ser Leu Tyr Asn Thr Lys Gln Met Leu Pro
1185          1190          1195          1200
Ala Glu Gly Val Lys Glu Leu Cys Leu Leu Leu Leu Asn Gln Ser Leu
          1205          1210          1215
Leu Leu Pro Ser Leu Lys Leu Leu Leu Glu Ser Arg Asp Glu His Leu
          1220          1225          1230
His Glu Met Ala Leu Glu Gln Ile Thr Ala Val Thr Thr Val Asn Asp
          1235          1240          1245
Ser Asn Cys Asp Gln Glu Leu Leu Ser Leu Leu Leu Asp Ala Lys Leu
          1250          1255          1260
Leu Val Lys Cys Val Ser Thr Pro Phe Tyr Pro Arg Ile Val Asp His
1265          1270          1275          1280
Leu Leu Ala Ser Leu Gln Gln Gly Arg Trp Asp Ala Glu Glu Leu Gly
          1285          1290          1295
Arg His Leu Arg Glu Ala Gly His Glu Ala Glu Ala Gly Ser Leu Leu
          1300          1305          1310
Leu Ala Val Arg Gly Thr His Gln Ala Phe Arg Thr Phe Ser Thr Ala
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<210> 1099

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1099

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<210> 1100

<211> 100

<212> PRT

<213> Homo sapiens

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Leu Thr Ile Ala Ser Ile Leu Ala Leu Ala Gly Ala Leu Ile Leu Ala
                35                40                45
Tyr Ile Leu Ala Ser Arg Thr Lys Arg Tyr Val Arg Lys Leu Thr Glu
                50                55                60
Gly Gln Ser Thr Leu Leu Ser Glu Lys Ser Gln Leu Glu Glu Met Val
65                70                75                80
Gln Leu Arg Thr Ala Glu Leu Glu Lys Ala Met Leu Ile Ala Lys Arg
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Glu Arg Ala Arg
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<210> 1101

<211> 540

<212> DNA

<213> Homo sapiens

<400> 1101

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<210> 1102

<211> 180

<212> PRT

<213> Homo sapiens

<400> 1102

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His Glu Gly Glu His Leu Leu Thr Leu Asp Asp Thr Asp Arg Thr Leu
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Asp Pro Asp Asp Leu Val Ile Ala Asp Asp Ser Gly Ala Ile Gly Leu
50                55                60
Ala Gly Val Met Gly Gly Ala Ala Thr Glu Val Thr Ala Glu Thr Thr
65                70                75                80
Ser Ile Ile Leu Glu Gly Ala His Phe Asp Pro Met Thr Gly Ala Arg

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Ala Tyr Arg Arg His Lys Leu Gly Ser Glu Ala Ser Arg Arg Phe Glu
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Arg Gly Val Asp Pro Ile Cys Ala His Thr Ala Ala Val Arg Ala Ala
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Glu Leu Leu Ala Gln Tyr Gly Gly Ala Thr Val Gly Glu Pro Thr Val
      130              135              140
Val Gly Glu Val Pro Glu Met Pro Arg Gln Thr Ile Asn Ala Asp Leu
      145              150              155              160
Pro Asn Arg Ile Leu Gly Thr Lys Val Pro Thr Glu Glu Val Ile Glu
      165              170              175
Ile Leu Thr Arg
      180

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<210> 1103
 <211> 537
 <212> DNA
 <213> Homo sapiens

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tcgcgaccca ggtgatcttt ccctcggcat agattgacgt ggcattctcg tcggagttaa
180
tcaagcagcg cttaggcagc tgctggggcg gcggcttcgc ctgctcgcc ggagcacacg
240
aacccttccc gaagataacc gccaaaggcct ggcacacctt ctgctgcacc cattccggct
300
tgacgcccga cgccaccgca ctggtgaaca tagccgcaat aaggagaatt gcgatgtatt
360
ccggcgccgc ggcaccccga tcgtcccttg tccgcatggg tctccctcc actacctacc
420
caatacaggg gagagcataa aaagaaaccc atagccgcac ctgagcccat ggccccaaac
480
cgggggccaa gccggggcca aaccatggga tcaaccggat gtccgtacat cagcgct
537

```

<210> 1104
 <211> 112
 <212> PRT
 <213> Homo sapiens

```

<400> 1104
Met Tyr Gly His Pro Val Asp Pro Met Val Trp Ala Arg Leu Gly Pro
  1              5              10              15
Arg Phe Gly Ala Met Gly Ser Gly Ala Ala Met Gly Phe Phe Leu Cys
      20              25              30
Ser Pro Leu Tyr Trp Val Gly Ser Gly Gly Glu Thr His Ala Asp Lys
      35              40              45
Gly Arg Ser Gly Cys Arg Arg Ala Gly Ile His Arg Asn Ser Pro Tyr
      50              55              60
Cys Gly Tyr Val His Gln Cys Gly Gly Gly Arg Arg Gln Ala Gly Met

```

```

65              70              75              80
Gly Ala Ala Glu Gly Val Pro Gly Leu Gly Gly Tyr Leu Arg Glu Gly
              85              90              95
Phe Val Cys Ser Gly Glu Leu Gly Glu Ala Ala Gly Pro Ala Ala Ala
              100              105              110

```

<210> 1105
 <211> 448
 <212> DNA
 <213> Homo sapiens

```

<400> 1105
agggacctgg ggcagcacgt gcacgtgggt gggaggctcc ttgctaccga cagccagcca
60
tggggtgggc ctttccgagg ctgcctccag gacctgcgac tcgatggctg ccacctcccc
120
ttctttcttc tgccactgga taactcaagc cagcccagcg agctcggcgg caggcagttc
180
tggaacctca ctgcgggctg cgtctccgag gacatgtgca gtctgaccc ctgtttcaat
240
ggtgggactt gctcgtcac ctggaatgac ttccactgta cctgccctgc caatttcacg
300
gggcctacat gtgcccagca gctgtggtgt cccggccagc cctgtctccc acctgccacg
360
tgtgaggagg tccctgatgg ctttgtgtgt gtggcggagg ccacgttccg cgagggtccc
420
cccgccgcgt tcagcgggca caacgcgt
448

```

<210> 1106
 <211> 149
 <212> PRT
 <213> Homo sapiens

```

<400> 1106
Arg Asp Leu Gly Gln His Val His Val Gly Gly Arg Leu Leu Ala Thr
1      5      10      15
Asp Ser Gln Pro Trp Gly Gly Pro Phe Arg Gly Cys Leu Gln Asp Leu
20     25     30
Arg Leu Asp Gly Cys His Leu Pro Phe Phe Pro Leu Pro Leu Asp Asn
35     40     45
Ser Ser Gln Pro Ser Glu Leu Gly Gly Arg Gln Ser Trp Asn Leu Thr
50     55     60
Ala Gly Cys Val Ser Glu Asp Met Cys Ser Pro Asp Pro Cys Phe Asn
65     70     75     80
Gly Gly Thr Cys Leu Val Thr Trp Asn Asp Phe His Cys Thr Cys Pro
85     90     95
Ala Asn Phe Thr Gly Pro Thr Cys Ala Gln Gln Leu Trp Cys Pro Gly
100    105    110
Gln Pro Cys Leu Pro Pro Ala Thr Cys Glu Glu Val Pro Asp Gly Phe
115    120    125
Val Cys Val Ala Glu Ala Thr Phe Arg Glu Gly Pro Pro Ala Ala Phe
130    135    140
Ser Gly His Asn Ala

```

145

<210> 1107
 <211> 618
 <212> DNA
 <213> Homo sapiens

<400> 1107
 acgcgttgat gaagtacctg ccacgcttca gcaatgacgg ctcggtgaac ggcttctata
 60
 tctttgttat cgatgagacc gaacgcaaac tcaccgaaga ggccctgcgc cacctcaacg
 120
 agaacctcga agagcgcgct gccacgcgca cacaggcgct ggctgaagcc aaccaacgcc
 180
 tggcaaaaca aaatgttcaa acgcaagcgc gccgaagacg cgctgcgtca cgcgcagaaa
 240
 atggaagccg gggggccagct caccggcggc atcgcccatg atttcaacaa catgctgacc
 300
 gggattatcg gcagcctgga cttgatgcag cgctacatcn aggccggggc cagcgacgaa
 360
 atcggccgnc ttactgacgc cgccgtatcg tccgcccatc gcgcggccgc cctcaccat
 420
 cggctgctgg cgttctcgcg ccgccagtcg ctggccccc gcccgctgga ccccaaccag
 480
 ctggtagcgt ccctggagga tctgttccag cgaaccaaag gcgcgcatat cacgctcaaa
 540
 gtgcaactgg gccgcgatat ctggcccgctg aataccgatg ccagccagtt ggaaaacgcc
 600
 ctgctcaacc tggcgatc
 618

<210> 1108
 <211> 182
 <212> PRT
 <213> Homo sapiens

<400> 1108
 Met Arg Pro Asn Ala Asn Ser Pro Lys Arg Pro Cys Ala Thr Ser Thr
 1 5 10 15
 Arg Thr Ser Lys Ser Ala Ser Pro Ser Ala His Arg Arg Trp Leu Lys
 20 25 30
 Pro Thr Asn Ala Trp Gln Asn Lys Met Phe Lys Arg Lys Arg Ala Glu
 35 40 45
 Asp Ala Leu Arg His Ala Gln Lys Met Glu Ala Gly Gly Gln Leu Thr
 50 55 60
 Gly Gly Ile Ala His Asp Phe Asn Asn Met Leu Thr Gly Ile Ile Gly
 65 70 75 80
 Ser Leu Asp Leu Met Gln Arg Tyr Ile Xaa Ala Gly Arg Ser Asp Glu
 85 90 95
 Ile Gly Arg Leu Thr Asp Ala Ala Val Ser Ser Ala His Arg Ala Ala
 100 105 110
 Ala Leu Thr His Arg Leu Leu Ala Phe Ser Arg Arg Gln Ser Leu Ala
 115 120 125
 Pro Arg Pro Leu Asp Pro Asn Gln Leu Val Ala Ser Leu Glu Asp Leu

1035

```

      130      135      140
Phe Gln Arg Thr Lys Gly Ala His Ile Thr Leu Lys Val Gln Leu Gly
145      150      155      160
Arg Asp Ile Trp Pro Val Asn Thr Asp Ala Ser Gln Leu Glu Asn Ala
      165      170      175
Leu Leu Asn Leu Ala Ile
      180

```

<210> 1109
 <211> 325
 <212> DNA
 <213> Homo sapiens

```

<400> 1109
accggtgagc atcagggagg caccatgcag acgactctcc catccagtct caagccgtcc
60
agcctcaaga tcgtcgcacc gctggggggc atcctcgtgc ccctggatca ggtgcccgat
120
cccgttttcg ccagaagat ggtgggagac gggatctccc tggaccccat ctcaaacgaa
180
ttgctggcgc cggtcgccgg caccgtgacc cagctccaca acgcccacca cgcgctcacg
240
atcacgaccc cggaaggcat cgagggttctg gtccatatcg gactggatac cgtgatgctg
300
cgcggcgaca gctatccccc ccccn
325

```

<210> 1110
 <211> 108
 <212> PRT
 <213> Homo sapiens

```

<400> 1110
Thr Gly Glu His Gln Gly Gly Thr Met Gln Thr Thr Leu Pro Ser Ser
1      5      10      15
Leu Lys Pro Ser Ser Leu Lys Ile Val Ala Pro Leu Gly Gly Ile Leu
20      25      30
Val Pro Leu Asp Gln Val Pro Asp Pro Val Phe Ala Gln Lys Met Val
35      40      45
Gly Asp Gly Ile Ser Leu Asp Pro Ile Ser Asn Glu Leu Leu Ala Pro
50      55      60
Val Ala Gly Thr Val Thr Gln Leu His Asn Ala His His Ala Leu Thr
65      70      75      80
Ile Thr Thr Pro Glu Gly Ile Glu Val Leu Val His Ile Gly Leu Asp
85      90      95
Thr Val Met Leu Arg Gly Asp Ser Tyr Pro Pro Pro
100      105

```

<210> 1111
 <211> 385
 <212> DNA
 <213> Homo sapiens

<400> 1111

nnacgcgtcg ccccggtgcg cctggcagtg ggagaagagc atgaccttac cgagctcgcg
 60
 actgaactcg tcaacgccgc ctatagccgg gttgacatgg tggaacgccg tggcgaattc
 120
 gcagtacgtg gcggcatcgt cgacgtcttc ccaccgggtgc tagaacaccc ggtccgtatc
 180
 gatttttttg gtgacgagat cgaggaaatg acctccttcg cggtagccga ccagcgatcc
 240
 accgacgaga ctcaccaaga actgatctgc gctccttgcc gtgagctcat cctcaccgac
 300
 gaggtacgtt cccgagccaa ggctttgctg accgaccatc ccgaattagc tgacatgttg
 360
 gagcggatcg gcaacgggtca agctt
 385

<210> 1112
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 1112
 Xaa Arg Val Ala Pro Val Arg Leu Ala Val Gly Glu Glu His Asp Leu
 1 5 10 15
 Thr Glu Leu Ala Thr Glu Leu Val Asn Ala Ala Tyr Ser Arg Val Asp
 20 25 30
 Met Val Glu Arg Arg Gly Glu Phe Ala Val Arg Gly Gly Ile Val Asp
 35 40 45
 Val Phe Pro Pro Val Leu Glu His Pro Val Arg Ile Asp Phe Phe Gly
 50 55 60
 Asp Glu Ile Glu Glu Met Thr Ser Phe Ala Val Ala Asp Gln Arg Ser
 65 70 75 80
 Thr Asp Glu Thr His Gln Glu Leu Ile Cys Ala Pro Cys Arg Glu Leu
 85 90 95
 Ile Leu Thr Asp Glu Val Arg Ser Arg Ala Lys Ala Leu Leu Thr Asp
 100 105 110
 His Pro Glu Leu Ala Asp Met Leu Glu Arg Ile Gly Asn Gly Gln Ala
 115 120 125

<210> 1113
 <211> 400
 <212> DNA
 <213> Homo sapiens

<400> 1113
 nnncgaccga tgagcgatcg cgaacccgctc aacctgggat acccctacgt cgagtctttc
 60
 cactcggact tctcggggac cggcggagtc gatcagaccg accgttctac caatatcgac
 120
 gagcacacca tcgaggagat gcatcagatc gcttcgcgtt accccgactc ccgttcggcg
 180
 ttgctgccga tctgcacct ggttcagtcg gtggacggac gcatctcgcc ggctcggtatt
 240
 gagactgcgg ctgaagtgtc cggcattacc accgcccagg tatccggggg ggcgaccttc
 300

tacaccatgt ataagaagca ccttgcgggc cagcatcaca tcggtgtctg caccacggcg
 360
 ctgtgcgccg tcatgggtgg cgaggaggtg cttgcccgtn
 400

<210> 1114
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 1114
 Xaa Arg Pro Met Ser Asp Arg Glu Pro Val Asn Leu Gly Tyr Pro Tyr
 1 5 10 15
 Val Glu Ser Phe His Ser Asp Phe Ser Gly Thr Gly Gly Val Asp Gln
 20 25 30
 Thr Asp Arg Ser Thr Asn Ile Asp Glu His Thr Ile Glu Glu Met His
 35 40 45
 Gln Ile Ala Ser Arg Tyr Pro Asp Ser Arg Ser Ala Leu Leu Pro Ile
 50 55 60
 Leu His Leu Val Gln Ser Val Asp Gly Arg Ile Ser Pro Val Gly Ile
 65 70 75 80
 Glu Thr Ala Ala Glu Val Leu Gly Ile Thr Thr Ala Gln Val Ser Gly
 85 90 95
 Val Ala Thr Phe Tyr Thr Met Tyr Lys Lys His Pro Ala Gly Gln His
 100 105 110
 His Ile Gly Val Cys Thr Thr Ala Leu Cys Ala Val Met Gly Gly Glu
 115 120 125
 Glu Val Leu Ala Arg
 130

<210> 1115
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 1115
 tctccgactg cacagattag agaaaggact gcgatgacca ttcgcaccac tcatgttggt
 60
 tccttgcccc gcacccccga gctgatcgag gcgaatcgtg cgcgccgtga gggttcgctc
 120
 ggcgaggctg acttcacgtc gctgctgcag gatcagggtg acggcgttgt gaagcgtcag
 180
 gctgagattg gcctggatat cgtcaatgac ggcgagtaac gtcacgcgat gcttgacacg
 240
 gttgattacg gcgcgtggtg gacgtattcc atctctcgtt tcggcgggct gtcctttgag
 300
 gacgtgcagc gttttgatgt gcgtcccccg gctggccgtg acggtcgcct gtctttctcg
 360
 tcgttcgctg agcgccgcga ctggcagcgt ttccggacgc gt
 402

<210> 1116
 <211> 134
 <212> PRT

<213> Homo sapiens

<400> 1116

```

Ser Pro Thr Ala Gln Ile Arg Glu Arg Thr Ala Met Thr Ile Arg Thr
 1           5           10           15
Thr His Val Gly Ser Leu Pro Arg Thr Pro Glu Leu Ile Glu Ala Asn
          20           25           30
Arg Ala Arg Arg Glu Gly Ser Leu Gly Glu Ala Asp Phe Thr Ser Leu
        35           40           45
Leu Gln Asp Gln Val Asp Gly Val Val Lys Arg Gln Ala Glu Ile Gly
       50           55           60
Leu Asp Ile Val Asn Asp Gly Glu Tyr Gly His Ala Met Leu Asp Thr
      65           70           75           80
Val Asp Tyr Gly Ala Trp Trp Thr Tyr Ser Ile Ser Arg Phe Gly Gly
          85           90           95
Leu Ser Phe Glu Asp Val Gln Arg Phe Asp Val Arg Pro Pro Ala Gly
        100          105          110
Arg Asp Gly Arg Leu Ser Phe Ser Ser Phe Ala Glu Arg Arg Asp Trp
       115          120          125
Gln Arg Phe Arg Thr Arg
      130

```

<210> 1117

<211> 307

<212> DNA

<213> Homo sapiens

<400> 1117

```

ggcgccgggtc ttgccctggc tggaagtggc atgcagacct tgggtgcggaa cccgctggct
60
gacccttacc tgctaggtgt atcggctggc gcaagtgtgg gagcaaccgc agtcacgct
120
ttggggatgt tcacttcgtg gggaaactcac cgactcactc ttggtgccct tgtaggggccc
180
ttggcggcag ctgcattggt ctatctcatt tccatggcgc aaggaggcat gacgccgctt
240
cggttggtgc tgcgggcgt ggtgttgtcc tcggcgttct cgcgttggcg agtttctctg
300
tctttcgt
307

```

<210> 1118

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1118

```

Gly Ala Gly Leu Ala Leu Ala Gly Ser Gly Met Gln Thr Leu Val Arg
 1           5           10           15
Asn Pro Leu Ala Asp Pro Tyr Leu Leu Gly Val Ser Ala Gly Ala Ser
        20           25           30
Val Gly Ala Thr Ala Val Ile Ala Leu Gly Met Phe Thr Ser Trp Gly
       35           40           45
Thr His Arg Leu Thr Leu Gly Ala Leu Val Gly Ala Leu Ala Ala Ala

```

```

      50              55              60
Ala Leu Val Tyr Leu Ile Ser Met Ala Gln Gly Gly Met Thr Pro Leu
65              70              75              80
Arg Leu Val Leu Ser Gly Val Val Leu Ser Ser Ala Phe Ser Arg Trp
      85              90              95
Arg Val Ser Ser Ser Phe
      100

```

<210> 1119
 <211> 353
 <212> DNA
 <213> Homo sapiens

```

<400> 1119
cgcgctccttg agatgcttga gcaggtcggt attgaggatc cagccagggt gatggattcc
60
tatccgcatac aactgtccgg tggccagcgt caacgggttc tgcttgccat ggcgttggtg
120
aactcgccgg atctgctcat ttgtgacgag ccgacgaccg ccttgacgt cacgggtgcag
180
tctcaggtac tggcgactat cgatgaggtg cttgactcgg ttggtgccgc atgcctatct
240
attaccacag atttggcggt tgtctcgac atctgccggg agcttatcgt gatgacgtcg
300
ggcaaggtcg ttgaagccgg atcagcgcgt gatgtgttat ctcaccctga tca
353

```

<210> 1120
 <211> 117
 <212> PRT
 <213> Homo sapiens

```

<400> 1120
Arg Val Leu Glu Met Leu Glu Gln Val Gly Ile Glu Asp Pro Ala Arg
1              5              10              15
Val Met Asp Ser Tyr Pro His Gln Leu Ser Gly Gly Gln Arg Gln Arg
      20              25              30
Val Leu Leu Ala Met Ala Leu Val Asn Ser Pro Asp Leu Leu Ile Cys
      35              40              45
Asp Glu Pro Thr Thr Ala Leu Asp Val Thr Val Gln Ser Gln Val Leu
50              55              60
Ala Thr Ile Asp Glu Val Leu Asp Ser Val Gly Ala Ala Cys Leu Phe
65              70              75              80
Ile Thr His Asp Leu Ala Val Val Ser His Ile Cys Arg Glu Leu Ile
      85              90              95
Val Met Thr Ser Gly Lys Val Val Glu Ala Gly Ser Ala Arg Asp Val
      100              105              110
Leu Ser His Pro Asp
      115

```

<210> 1121
 <211> 406
 <212> DNA
 <213> Homo sapiens

<400> 1121
 tgatcaccca tgetccactc gaccgcgcgc tgcacgatgc gacggctgag acgatgctcg
 60
 cccagggcac ggtgttcac cgcaccttga cgatgatgaa aggcgtcgcc gcgaatctca
 120
 ccgcagcggg cgttcccggg gtgagctatg cacacgcca cgagagcacg cgcgcgatgc
 180
 atgccgcggg cgttccgggc ctggccggca ccgacgccta catcgggtcc ttcacacggg
 240
 catcgccgcc atacggcgag agcatgcacg acgaagacgc ctacatcggg ctccctgaac
 300
 gggcaatgcc gccatacggc gagagcatgc acgacgaact cgctctgctc gtggacgccg
 360
 gcctgtcaac agccgaagcg ctgcgcgctg ccacctcgac gggcgc
 406

<210> 1122
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 1122
 Met Leu Ala Gln Gly Thr Val Phe Ile Pro Thr Leu Thr Met Met Lys
 1 5 10 15
 Gly Val Ala Ala Asn Leu Thr Ala Ala Gly Val Pro Gly Val Ser Tyr
 20 25 30
 Ala His Ala His Glu Ser Thr Arg Ala Met His Ala Ala Gly Val Pro
 35 40 45
 Val Leu Ala Gly Thr Asp Ala Tyr Ile Gly Ser Phe Thr Arg Ala Ser
 50 55 60
 Pro Pro Tyr Gly Glu Ser Met His Asp Glu Asp Ala Tyr Ile Gly Leu
 65 70 75 80
 Leu Glu Arg Ala Met Pro Pro Tyr Gly Glu Ser Met His Asp Glu Leu
 85 90 95
 Ala Leu Leu Val Asp Ala Gly Leu Ser Thr Ala Glu Ala Leu Arg Ala
 100 105 110
 Ala Thr Ser Thr Gly
 115

<210> 1123
 <211> 337
 <212> DNA
 <213> Homo sapiens

<400> 1123
 gccggcgatg cggttcattaa ggccctaagat gcgcgcgacgc ctccccgctt tcctcgccct
 60
 cgcctccacc gcccttgccg cagcggggat ggtgggggtgc tcgtccgagg gggcatcgcc
 120
 aagcgaatgc tccccgttg atattgccgc agtgcgcgag gccctgccgc attcgctcgc
 180
 taaggcgaag ctcgaccgc actccaccaa cgaggatgaa cactcctttt ccattgctcta
 240

ccgcgcgcaa gataaggagc aggtcagctt gctggggacg aagtatgagg ccgacgggtgc
 300
 acccgtctgc cccgatgacc ccaatgagggc agcgcgc
 337

<210> 1124

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1124

Met	Arg	Ser	Leu	Arg	Pro	Lys	Met	Arg	Arg	Arg	Leu	Pro	Ala	Phe	Leu
1				5				10						15	
Ala	Leu	Ala	Ser	Thr	Ala	Leu	Ala	Ala	Ala	Gly	Met	Val	Gly	Cys	Ser
			20				25						30		
Ser	Glu	Gly	Ala	Ser	Pro	Ser	Glu	Cys	Ser	Pro	Val	Asp	Ile	Ala	Ala
		35				40					45				
Val	Arg	Glu	Ala	Leu	Pro	His	Ser	Leu	Ala	Lys	Ala	Lys	Leu	Asp	Pro
	50				55				60						
His	Ser	Thr	Asn	Glu	Asp	Glu	His	Ser	Phe	Ser	Met	Leu	Tyr	Arg	Ala
65				70				75				80			
Gln	Asp	Lys	Glu	Gln	Val	Ser	Leu	Leu	Gly	Thr	Lys	Tyr	Glu	Ala	Asp
			85				90					95			
Gly	Ala	Pro	Val	Cys	Pro	Asp	Asp	Pro	Asn	Glu	Ala	Ala	Arg		
			100				105					110			

<210> 1125

<211> 555

<212> DNA

<213> Homo sapiens

<400> 1125

nncttgaatc gaatcggcat tgcgtctaaa catgacgttg agacactctc tgctaagctc
 60
 gaagagctga cggcattgct agaacgtgtc gcgcgtaaac actaaggaga catcgggatg
 120
 gctgttaaaa agactactca gaaagaaggc agctcgtgga tcggggaagt tgaaaaatat
 180
 tcccgtaaaa tctggcttgc tggtttaggc gtgtactcga aggttagcag tgacggcggc
 240
 aaatacttcg agacgttggt caaggacggc gagaaggccg agaagttgac caagagccca
 300
 gtcggtaaaa aagtagaggc ggcaaaagcg agcgcgggtt ctgcgaaatc gagcatttcg
 360
 gatacctggg gcaagttgga agagactttc gacaagcgtc tcaacagtgc tatttcgcga
 420
 ttgggcgtgc ccagcaaagc ggaactgaag acgctgcaca gcaaggtcga taccctgacc
 480
 aagcaaatac aaaaactcac cgggtgcaaa gtggccccgg ctaaaacggc agccgctaaa
 540
 cctgctgcca agctt
 555

<210> 1126

<211> 146
 <212> PRT
 <213> Homo sapiens

<400> 1126
 Met Ala Val Lys Lys Thr Thr Gln Lys Glu Gly Ser Ser Trp Ile Gly
 1 5 10 15
 Glu Val Glu Lys Tyr Ser Arg Lys Ile Trp Leu Ala Gly Leu Gly Val
 20 25 30
 Tyr Ser Lys Val Ser Ser Asp Gly Gly Lys Tyr Phe Glu Thr Leu Val
 35 40 45
 Lys Asp Gly Glu Lys Ala Glu Lys Leu Thr Lys Ser Pro Val Gly Lys
 50 55 60
 Lys Val Glu Ala Ala Lys Ala Ser Ala Gly Ser Ala Lys Ser Ser Ile
 65 70 75 80
 Ser Asp Thr Trp Gly Lys Leu Glu Glu Thr Phe Asp Lys Arg Leu Asn
 85 90 95
 Ser Ala Ile Ser Arg Leu Gly Val Pro Ser Lys Ala Glu Leu Lys Thr
 100 105 110
 Leu His Ser Lys Val Asp Thr Leu Thr Lys Gln Ile Glu Lys Leu Thr
 115 120 125
 Gly Ala Lys Val Ala Pro Ala Lys Thr Ala Ala Ala Lys Pro Ala Ala
 130 135 140
 Lys Leu
 145

<210> 1127
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 1127
 cccgaccgcg tactcgtggt cgggtgccgga gtgatgggtg cagcacacgc acacgcgctc
 60
 cgcggggtccc tccaggcagt cgtgtgcggc gtggtcgacc tgcaggagcg agcagcgcaa
 120
 tcactcgctt cggaagtggg cgtacccggg ttcaccgacc tgggtgaaggc gatcgagtcg
 180
 accgctccgg acgccgcggt catcgccacg cgggactcgg ctcaccgcca accggctgag
 240
 accgccatcg acgccggcct tgccgtcctg gtcgagaaac cgctcgccac gaccgtcgat
 300
 gacgccgaag cgatcgtgct ccgcgctgaa cgggccggcg tccgtctcat ga
 352

<210> 1128
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 1128
 Pro Asp Arg Val Leu Val Val Gly Ala Gly Val Met Gly Ala Ala His
 1 5 10 15
 Ala His Ala Leu Arg Gly Ser Leu Gln Ala Val Val Cys Gly Val Val

```

                20                25                30
Asp Leu Gln Glu Arg Ala Ala Gln Ser Leu Ala Ser Glu Val Gly Val
                35                40                45
Pro Gly Phe Thr Asp Leu Val Lys Ala Ile Glu Ser Thr Ala Pro Asp
                50                55                60
Ala Ala Val Ile Ala Thr Pro Asp Ser Ala His Arg Gln Pro Ala Glu
65                70                75                80
Thr Ala Ile Asp Ala Gly Leu Ala Val Leu Val Glu Lys Pro Leu Ala
                85                90                95
Thr Thr Val Asp Asp Ala Glu Ala Ile Val Leu Arg Ala Glu Arg Ala
                100                105                110
Gly Val Arg Leu Met
                115

```

<210> 1129

<211> 336

<212> DNA

<213> Homo sapiens

<400> 1129

```

ntggcagccc tggaggagcc gatggtggac ctggacggcg agctgccttt cgtgcggccc
60
ctgccccaca ttgccgtgct ccaggacgag ctgccgcaac tcttccagga tgacgacgtc
120
ggggccgatg aggaagaggc agagttagcg ggcgaacaca cgctcacaga gaagtttgtc
180
tgccctggatg actccttttg ccatgactgc agcttgacct gtgatgactg caggaacgga
240
gggacctgcc tcctgggcct ggatggctgg gattgccccg agggctggac tgggctcatc
300
tgcaatgaga cttggtcctc gggctgcatg gatatt
336

```

<210> 1130

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1130

```

Xaa Ala Ala Leu Glu Glu Pro Met Val Asp Leu Asp Gly Glu Leu Pro
 1                5                10                15
Phe Val Arg Pro Leu Pro His Ile Ala Val Leu Gln Asp Glu Leu Pro
                20                25                30
Gln Leu Phe Gln Asp Asp Asp Val Gly Ala Asp Glu Glu Ala Glu
                35                40                45
Leu Arg Gly Glu His Thr Leu Thr Glu Lys Phe Val Cys Leu Asp Asp
                50                55                60
Ser Phe Gly His Asp Cys Ser Leu Thr Cys Asp Asp Cys Arg Asn Gly
65                70                75                80
Gly Thr Cys Leu Leu Gly Leu Asp Gly Trp Asp Cys Pro Glu Gly Trp
                85                90                95
Thr Gly Leu Ile Cys Asn Glu Thr Trp Ser Ser Gly Cys Met Asp Ile
                100                105                110

```


<210> 1131
 <211> 672
 <212> DNA
 <213> Homo sapiens

<400> 1131
 gcgttggtgg tgctcatggc ccgggaaaat ccgctggatc aatacctctt tgagcaccac
 60
 gaattattgt tctcgtcctc ggtggaatcg actgtgttgc acccgataa cccgtatgtg
 120
 ctcggcccg c acgtggccgc ggccgccag gaggcatacc tctcccctgc ggacgaagag
 180
 ttttacgggt cggcctttgc cgggatatgc aaaacgctga caggccagaa cgtactgcga
 240
 cgtcgcggaa atcggctgtt ctggactcgt ccggaacggg ctgtcgacgc catcgacctg
 300
 cgatcgccgg caggcaaagg gattgacatt atcgacgtgt ccaccgggag ggtcatcggg
 360
 gtagtgcacg aagccgccgc agaccgtacc gtgcatccag gcgcggtgta cctgcatcag
 420
 ggggatcagt ggctggtcga cgaatacaac ccggtcgagc accacgccct ggtgcaccag
 480
 gacctgccgg gatattggac tcaaccgcag tcagcgtcga cggtgagaat ccttcgggag
 540
 gagagacgtc gcgcttgtgg tcccggatat gtggcgtgcg ggcaggtgga actgacagag
 600
 caagttgttg ggtatctgcg tcgcgacgaa ttcaccaatg atgtgtggta ctcgctggcc
 660
 ctcgagatgc cc
 672

<210> 1132
 <211> 224
 <212> PRT
 <213> Homo sapiens

<400> 1132
 Ala Leu Val Val Leu Met Ala Arg Glu Asn Pro Leu Asp Gln Tyr Leu
 1 5 10 15
 Phe Glu His Pro Glu Leu Leu Phe Ser Ser Ser Val Glu Ser Thr Val
 20 25 30
 Leu His Pro Asp Asn Pro Tyr Val Leu Gly Pro His Val Ala Ala Ala
 35 40 45
 Ala Gln Glu Ala Tyr Leu Ser Pro Ala Asp Glu Glu Phe Tyr Gly Ser
 50 55 60
 Ala Phe Ala Gly Ile Cys Lys Thr Leu Thr Gly Gln Asn Val Leu Arg
 65 70 75 80
 Arg Arg Gly Asn Arg Leu Phe Trp Thr Arg Pro Glu Arg Ala Val Asp
 85 90 95
 Ala Ile Asp Leu Arg Ser Ala Ala Gly Lys Gly Ile Asp Ile Ile Asp
 100 105 110
 Val Ser Thr Gly Arg Val Ile Gly Val Val Asp Glu Ala Ala Ala Asp
 115 120 125
 Arg Thr Val His Pro Gly Ala Val Tyr Leu His Gln Gly Asp Gln Trp

```

      130              135              140
Leu Val Asp Glu Tyr Asn Pro Val Glu His His Ala Leu Val His Gln
145              150              155              160
Asp Leu Pro Gly Tyr Trp Thr Gln Pro Gln Ser Ala Ser Thr Val Arg
      165              170              175
Ile Leu Arg Glu Glu Arg Arg Arg Ala Cys Gly Pro Gly Tyr Val Ala
      180              185              190
Cys Gly Gln Val Glu Leu Thr Glu Gln Val Val Gly Tyr Leu Arg Arg
      195              200              205
Asp Glu Phe Thr Asn Asp Val Trp Tyr Ser Leu Ala Leu Glu Met Pro
      210              215              220

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<210> 1133

<211> 796

<212> DNA

<213> Homo sapiens

<400> 1133

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acgcgtgaag ggggggtccag cgggtgtggc actcgatgac aagacagttt gagagcggct
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tgtctccggg gacctggcgt aggtctcttc tgccttaacc cttggctttt gcacttcctc
120
tgtctgtcct ccatacaagc ttcttgcccc tagggaggac gggcttctta acagggggag
180
ccggttcttg tcctaacccc actggcatct tacactctgg gagatagctt cccctgaga
240
ggcgagttag ccacgtaagg ggaggtgggc gatggcttcc cttctgtctt ggggtggggg
300
agtcaggtag agtatTTTTT cttttaaaagc atcattgac acataataag gtttgcata
360
gtccttaatc acagacctgt gaaatttgga gaattcacgg cacctaggat gggagtgagc
420
ttctgattgt gagctgattt gggagctaac ctcaaggaaa ctcctcttgc aagccccctg
480
ctgggtgtcg gggccttcgc caggacctc cgggggactc tggacgtctt ttgtctgccc
540
ttccttttcc ctcacctcgc tccccgtga gaaagtggg ctcacgcagc tcagctcagt
600
gacagagggg ttattagggg tagctctggg acccatcttt tggtgatttc ttctctctct
660
ttctctaata gaataattgt ttctgtctac acttctttat tttctctctt ctacagctgc
720
cttctaaaaa tgtgcttttc tgttcctgca gaactgaagc ttgcatggcc tttgttgtag
780
ctttcccttc acgcgt
796

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<210> 1134

<211> 147

<212> PRT

<213> Homo sapiens

<400> 1134

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Met Gly Pro Arg Ala Thr Pro Asn Lys Pro Ser Val Thr Glu Leu Ser

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      1           5           10           15
Cys Met Ser Pro Thr Phe Ser Arg Gly Ser Glu Val Arg Glu Lys Glu
      20           25           30
Gly Gln Thr Lys Ser Val Gln Ser Pro Arg Glu Val Pro Gly Glu Gly
      35           40           45
Pro Asp Thr Gln Gln Gly Ala Cys Lys Arg Ser Phe Leu Glu Val Ser
      50           55           60
Ser Gln Ile Ser Ser Gln Ser Glu Ala His Ser His Pro Arg Cys Arg
      65           70           75           80
Glu Phe Ser Lys Phe His Arg Ser Val Ile Lys Asp Tyr Asp Lys Pro
      85           90           95
Tyr Tyr Val Ile Asn Asp Ala Leu Lys Glu Lys Ile Leu Tyr Leu Thr
      100           105           110
Pro Pro Thr Gln Asp Arg Arg Glu Ala Ile Ala His Leu Pro Leu Arg
      115           120           125
Gly Ser Leu Ala Ser Gln Gly Glu Ala Ile Ser Gln Ser Val Arg Cys
      130           135           140
Gln Trp Gly
145

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<210> 1135

<211> 376

<212> DNA

<213> Homo sapiens

<400> 1135

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gatcaggcca cacaggacaa cttcgagaag ggctccatct tcccaccctt caccagcatc
60
agaaagatct ctgcgcacat cgctgcagcc gtggctgcaa aagcctacga gctcggtctg
120
gcgaccgcgc tgccctcccc cagcgacctg gtgaaatatg cagagaactg catgtacact
180
cccgtctacc gcaactaccg gtagtgctgc ggggatcaat tttgcagtaa taaaaaatct
240
actatcaacg cggatggtag tctgttgttt atagtccttg ctgctaacca cccttggtgc
300
tggtgctgct ggagaggcat tgtacctgtc catgcatata tgatatatat atgttgtaac
360
gttgtgaaag caaact
376

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<210> 1136

<211> 67

<212> PRT

<213> Homo sapiens

<400> 1136

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Asp Gln Ala Thr Gln Asp Asn Phe Glu Lys Gly Ser Ile Phe Pro Pro
1           5           10           15
Phe Thr Ser Ile Arg Lys Ile Ser Ala His Ile Ala Ala Val Ala
20           25           30
Ala Lys Ala Tyr Glu Leu Gly Leu Ala Thr Arg Leu Pro Pro Pro Ser
35           40           45
Asp Leu Val Lys Tyr Ala Glu Asn Cys Met Tyr Thr Pro Val Tyr Arg

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50 55 60
 Asn Tyr Arg
 65
 <210> 1137
 <211> 357
 <212> DNA
 <213> Homo sapiens
 <400> 1137
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 atcattgacc tgcaccagtc gctgacctac attgataagg cgtacgcctt cgtcaaggag
 120
 actgtcgcca agggcggcca gattcttttc gtcggcacga agaagcaggc ccaggagtcc
 180
 atcgttgagc aggccactcg cggtggcatg ccctatgtca accagcggtg gcttggggga
 240
 atgctcacta atttcagac catctcgaag cgcattgccc ggctcaagga gctcgaggcc
 300
 atggactttg acaaggtttc cggctccggt ctcaccaaga aggagctgct tatgctc
 357

<210> 1138
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1138
 Thr Arg Arg Trp Asn Pro Lys Met Lys Arg Phe Ile Phe Thr Glu Arg
 1 5 10 15
 Asn Gly Ile Tyr Ile Ile Asp Leu His Gln Ser Leu Thr Tyr Ile Asp
 20 25 30
 Lys Ala Tyr Ala Phe Val Lys Glu Thr Val Ala Lys Gly Gly Gln Ile
 35 40 45
 Leu Phe Val Gly Thr Lys Lys Gln Ala Gln Glu Ser Ile Val Glu Gln
 50 55 60
 Ala Thr Arg Val Gly Met Pro Tyr Val Asn Gln Arg Trp Leu Gly Gly
 65 70 75 80
 Met Leu Thr Asn Phe Gln Thr Ile Ser Lys Arg Ile Ala Arg Leu Lys
 85 90 95
 Glu Leu Glu Ala Met Asp Phe Asp Lys Val Ser Gly Ser Gly Leu Thr
 100 105 110
 Lys Lys Glu Leu Leu Met Leu
 115

<210> 1139
 <211> 456
 <212> DNA
 <213> Homo sapiens

<400> 1139
 gtgcacaggc cgtctgaggc catgccgcgg acgatcgatc cgagtatggc ggcaccttca
 60

ccaatcccggt aggaccggtc tcgtccagca tcgaccaagg cgctgttgag gcgttcggct
 120
 tcggtaatga actcgatgcg ctcaatatcc acgggggtag cgaaatcgta gatcttgccc
 180
 agactgaggc cttggaggag cgcgggcgtc ggggggacgt ggccctgcggc cgggcgttcc
 240
 ttgcttctca ggaacttcgtc gtcgcggtcg acaaggaata cgtttgtgtg gtcgcctgca
 300
 atgcatgctc gagcgtggtg accatcgagg tgaaggacgg tttcggcata gaggtcatcg
 360
 tccacatcgg ccacagttag ttcgacgact cctgagtcga ctagatgacg cgccttctct
 420
 gccgcgtctt cgctgacgtc ggccaggacc gctagc
 456

<210> 1140
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 1140
 Met Trp Thr Met Thr Ser Met Pro Lys Pro Ser Phe Thr Ser Met Val
 1 5 10 15
 Thr Thr Leu Glu His Ala Leu Gln Ala Thr Thr Gln Thr Tyr Ser Leu
 20 25 30
 Ser Ala Ala Thr Thr Lys Ser Leu Arg Ala Arg Asn Ala Arg Pro Gln
 35 40 45
 Ala Thr Ser Pro Arg Arg Pro Arg Ser Ser Lys Ala Ser Val Trp Pro
 50 55 60
 Arg Ser Thr Ile Ser Leu Pro Pro Trp Ile Leu Ser Ala Ser Ser Ser
 65 70 75 80
 Leu Pro Lys Pro Asn Ala Ser Thr Ala Pro Trp Ser Met Leu Asp Glu
 85 90 95
 Thr Gly Pro Thr Gly Leu Val Lys Val Pro Pro Tyr Ser Asp Arg Ser
 100 105 110
 Ser Ala Ala Trp Pro Gln Thr Thr Cys Ala
 115 120

<210> 1141
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 1141
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 60
 ggcgaccagt acaaggacgt ggtggcggtt ggccctgttg ttctggtgct gttgttccgt
 120
 ccgaccggca ttctggggcg tccggagggt gagaaagtat gaggagatat cttaaactcg
 180
 cgtttttcag cgccctgttg gtgtggggcg tggcctttcc ggtactcggc ctcaagctga
 240
 gcattgtcgg gatcaaccac gaagtgcatt gcaccgggtc cgtagacctg accatcatcg
 300

ccctgtgctc ggtgccgatg ttctcgcgcg tgctgtttac ccagcaagtc ggtg
354

<210> 1142
<211> 53
<212> PRT
<213> Homo sapiens

<400> 1142
Gly Ala Met Leu Gly Gly Leu Val Leu Gly Val Ala Glu Ala Phe Gly
1 5 10 15
Ala Asp Ile Phe Gly Asp Gln Tyr Lys Asp Val Val Ala Phe Gly Leu
20 25 30
Leu Val Leu Val Leu Leu Phe Arg Pro Thr Gly Ile Leu Gly Arg Pro
35 40 45
Glu Val Glu Lys Val
50

<210> 1143
<211> 353
<212> DNA
<213> Homo sapiens

<400> 1143
acgcgttgca catccccag gaccatcaac cgcggcattg ccgcatagac ctggagatcc
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catgcaacgt gaaatgaagt tcgaatcgat caaggcaaag gccaaaggcga tgctcatcgg
120
cgcagccgac gacacagcaa gcgcaggcgc gaccaaccga ggggtggctca acagcgccgc
180
attcgaaatc ctggcccacg tggccgtcaa tgcccaacac tacgcgctct ccgagagacc
240
ggcgctggag gagttcgcca agagcttcca gccgcgcaac aaccaggact acgtggccgc
300
gatcgccaag aaggccgcga accacaccat gcatcccggc aggcagtcga ttt
353

<210> 1144
<211> 102
<212> PRT
<213> Homo sapiens

<400> 1144
Met His Gly Val Val Arg Gly Leu Leu Gly Asp Arg Gly His Val Val
1 5 10 15
Leu Val Val Ala Arg Leu Glu Ala Leu Gly Glu Leu Leu Gln Arg Arg
20 25 30
Ser Leu Gly Glu Arg Val Val Leu Gly Ile Asp Gly His Val Gly Gln
35 40 45
Asp Phe Glu Cys Gly Ala Val Glu Pro Pro Ser Val Gly Arg Ala Cys
50 55 60
Ala Cys Cys Val Val Gly Cys Ala Asp Glu His Arg Leu Gly Leu Cys
65 70 75 80
Leu Asp Arg Phe Glu Leu His Phe Thr Leu His Gly Ile Ser Arg Ser

85
Met Arg Gln Cys Arg Gly
100

90

95

<210> 1145
<211> 360
<212> DNA
<213> Homo sapiens

<400> 1145
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60
catgaagtgg ccggcacctg ggtactcggg ctgtcggcgg cgatggctct gatgggtgtt
120
ttctacgtcc aggtcatcgc caagaagatc aatcctcgac cctccgacga gaaggacgcc
180
gaggtgatcg acggggctgg tccggtcggg ttcttcccgc cacagagtat ctggccggtc
240
tggtgcgcgc tcgttgctgc catcatgtgc ctgggccga tcttcggctg gtggatctct
300
ctgctcgggc tgggcattgt tatctgggcc gcctcgggtt gggcttttga gtactaccgc
360

<210> 1146
<211> 120
<212> PRT
<213> Homo sapiens

<400> 1146
Val Phe Gly Gly Leu Gly Leu Phe Tyr Cys Val Met Thr Pro Val Tyr
1 5 10 15
Trp Phe Ser Ala His Glu Val Ala Gly Thr Trp Val Leu Gly Leu Ser
20 25 30
Ala Ala Met Ala Leu Met Val Phe Phe Tyr Val Gln Val Ile Ala Lys
35 40 45
Lys Ile Asn Pro Arg Pro Ser Asp Glu Lys Asp Ala Glu Val Ile Asp
50 55 60
Gly Ala Gly Pro Val Gly Phe Phe Pro Pro Gln Ser Ile Trp Pro Phe
65 70 75 80
Trp Cys Ala Leu Val Val Ala Ile Met Cys Leu Gly Pro Ile Phe Gly
85 90 95
Trp Trp Ile Ser Leu Leu Gly Leu Gly Ile Val Ile Trp Ala Ala Ser
100 105 110
Gly Trp Ala Phe Glu Tyr Tyr Arg
115 120

<210> 1147
<211> 409
<212> DNA
<213> Homo sapiens

<400> 1147
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gccccaaaagg catccacctt cttcatcaat ccagaattga tcatgctcat gcctgtgggt
 120
 ggatcactat gtgctctcca aattgggagg ggaagtctac tctcctctct cctctctctc
 180
 ccaccttccc ctctctcttc tctcctttct attcccaggg cagtgggaaca tgatgagggt
 240
 cttttccctt catggatata ctctttctgc cctccacata aaggggcatt gatggatctt
 300
 caagaatggg atgcctttcc ctagaaaggc taaatattca tgaggctgaa tgtgaggatc
 360
 cagagtacac tgaaatataa ctgggtcatca gtacacatag aatctgatn
 409

<210> 1148
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1148
 Met Gln Ser Gly Leu Leu Lys Val Met Ile Val Ala Lys Asn Ile Glu
 1 5 10 15
 Ala Lys Lys Ala Ser Thr Phe Phe Ile Asn Pro Glu Leu Ile Met Leu
 20 25 30
 Met Pro Val Gly Gly Ser Leu Cys Ala Leu Gln Ile Gly Arg Gly Ser
 35 40 45
 Leu Leu Ser Ser Leu Leu Ser Leu Pro Pro Ser Pro Leu Ser Ser Leu
 50 55 60
 Leu Ser Ile Pro Arg Ala Val Glu His Asp Glu Val Leu Phe Pro Ser
 65 70 75 80
 Trp Ile Ser Ser Phe Cys Pro Pro His Lys Gly Ala Leu Met Asp Leu
 85 90 95
 Gln Glu Trp Asp Ala Phe Pro
 100

<210> 1149
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 1149
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 60
 cgtgaggcgg tatcgcatat cattaccttc ggtaccatgg cggcgaaagc gggtattcgt
 120
 gacgtggggc gtgtactggg tcaccogtat ggcttcgctg atcgcatctc caagctgggt
 180
 ccgccccgatc cgggcatgac gctggaaaaa gcctttgccg ccgaaccgca gttgccggaa
 240
 atctacgagg ccgatgagga agtcaaagcg ctgatcgaca tggcgcgcaa gctgggaagg
 300
 gtgacgcgg
 309

<210> 1150

<211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1150
 Val Asp Phe Cys Met Glu Lys Arg Asp Leu Val Ile Glu His Val Ala
 1 5 10 15
 Glu Met Tyr Gly Arg Glu Ala Val Ser Gln Ile Ile Thr Phe Gly Thr
 20 25 30
 Met Ala Ala Lys Ala Val Ile Arg Asp Val Gly Arg Val Leu Gly His
 35 40 45
 Pro Tyr Gly Phe Val Asp Arg Ile Ser Lys Leu Val Pro Pro Asp Pro
 50 55 60
 Gly Met Thr Leu Glu Lys Ala Phe Ala Ala Glu Pro Gln Leu Pro Glu
 65 70 75 80
 Ile Tyr Glu Ala Asp Glu Glu Val Lys Ala Leu Ile Asp Met Ala Arg
 85 90 95
 Lys Leu Gly Arg Val Thr Arg
 100

<210> 1151
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 1151
 gcgcgcattt tttgcaaccc aagcgacgtc attatggccg agtcgccggc ttatgtcggg
 60
 gcgctcaata ccttcgcctc gtaccaaact gaggtcattc acgtcgacat ggacgacagc
 120
 ggggttggtc cggaatccct gcgtgagaaa gtgactgcag cgcgtcaaga cggcaagtcg
 180
 gtgaagtcc tttacacggt tcctaactac tcgaaccctg cgggaatctc gcaatccacc
 240
 gagegtcgcc gggagatcct agcgggtggct gacgagctgg atctgttggt ggttgaggac
 300
 aaccgtacg gggtactcaa cctcgatggg gatccactgc cgacgttgaa gtcgatggat
 360

<210> 1152
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 1152
 Ala Arg Ile Phe Cys Asn Pro Ser Asp Val Ile Met Ala Glu Ser Pro
 1 5 10 15
 Ala Tyr Val Gly Ala Leu Asn Thr Phe Ala Ser Tyr Gln Thr Glu Val
 20 25 30
 Ile His Val Asp Met Asp Asp Ser Gly Leu Val Pro Glu Ser Leu Arg
 35 40 45
 Glu Lys Val Thr Ala Ala Arg Gln Asp Gly Lys Ser Val Lys Phe Leu
 50 55 60
 Tyr Thr Val Pro Asn Tyr Ser Asn Pro Ser Gly Ile Ser Gln Ser Thr

```

65              70              75              80
Glu Arg Arg Arg Glu Ile Leu Ala Val Ala Asp Glu Leu Asp Leu Leu
              85              90              95
Val Val Glu Asp Asn Pro Tyr Gly Leu Leu Asn Leu Asp Gly Asp Pro
              100              105              110
Leu Pro Thr Leu Lys Ser Met Asp
              115              120

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<210> 1153
 <211> 416
 <212> DNA
 <213> Homo sapiens

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<400> 1153
gcggtggattc gtcctggcgg cgctcgctacc gacctgcccc agaccgggct cgaccagttg
60
cgtgacctca tcaagcggat ggaaaagtac cccccgaga tcggtcagtt ctgcaatgag
120
aatccgatct ttaaggcccc cactcagggc attggttacg ctgatctgtc tacctgtatg
180
gccctgggag ttactgggtcc tgctctgcgc gctaccggcc tgccgtggga cctgcgcaag
240
accagccctt attgcgatta cgacacgtat gacttcgacg tcgccacctg ggatacctgt
300
gactgttacg ggcgtttccg catccgcctg gaagagatgg accagtcggt ggcgattctc
360
aagcaatgcc tcaaacgcct cgaggacacc cagggtgacc gtaatatggt cgagga
416

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<210> 1154
 <211> 138
 <212> PRT
 <213> Homo sapiens

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<400> 1154
Ala Trp Ile Arg Pro Gly Gly Val Ala Thr Asp Leu Pro Glu Thr Gly
1      5      10      15
Leu Asp Gln Leu Arg Asp Leu Ile Lys Arg Met Glu Lys Tyr Leu Pro
20     25     30
Glu Ile Gly Gln Phe Cys Asn Glu Asn Pro Ile Phe Lys Ala Arg Thr
35     40     45
Gln Gly Ile Gly Tyr Ala Asp Leu Ser Thr Cys Met Ala Leu Gly Val
50     55     60
Thr Gly Pro Ala Leu Arg Ala Thr Gly Leu Pro Trp Asp Leu Arg Lys
65     70     75     80
Thr Gln Pro Tyr Cys Asp Tyr Asp Thr Tyr Asp Phe Asp Val Ala Thr
85     90     95
Trp Asp Thr Cys Asp Cys Tyr Gly Arg Phe Arg Ile Arg Leu Glu Glu
100    105    110
Met Asp Gln Ser Val Arg Ile Leu Lys Gln Cys Leu Lys Arg Leu Glu
115    120    125
Asp Thr Gln Gly Asp Arg Asn Met Val Glu
130    135

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<210> 1155
 <211> 339
 <212> DNA
 <213> Homo sapiens

<400> 1155
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 60
 tggcttatgg gacgcttctc agccctaagt aggaaaacag cagtgaaaat ggcaaccaa
 120
 acatcacgca ggactggggg ttttggggaa acagctcact ttagagcagt gcagtgtaga
 180
 gctttccgctc ttctaccagg gtccaccttt aacactgttt atctgaaaat tttccccctg
 240
 gcttactcgc ttgcagctgc ccactttgca gaaagatggc gctctgatct ctacgctccc
 300
 tgttccttca gggactccat agtatTTTTT ttcacgct
 339

<210> 1156
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1156
 Met Gly Arg Phe Ser Ala Leu Ser Arg Lys Thr Ala Val Lys Met Ala
 1 5 10 15
 Thr Lys Thr Ser Arg Arg Thr Gly Gly Phe Gly Glu Thr Ala His Phe
 20 25 30
 Arg Ala Val Gln Cys Arg Ala Phe Arg Leu Leu Pro Gly Ser Thr Phe
 35 40 45
 Asn Thr Val Tyr Leu Lys Ile Phe Pro Leu Ala Tyr Ser Leu Ala Ala
 50 55 60
 Ala His Phe Ala Glu Arg Trp Arg Ser Asp Leu Tyr Ala Pro Cys Ser
 65 70 75 80
 Phe Arg Asp Ser Ile Val Phe Phe Phe Thr Arg
 85 90

<210> 1157
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 1157
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 ctggcaaaac tcgtgacccg acacctgagg gcctatcggt tgcacgttgc cgtcatcatc
 120
 gttatgcagg tttgcgcca aatcgcggcc ctgaccttgc caaccatcaa cgcagacatc
 180
 atcaacaagg gcgtcgtgac agcggatacc ggatatgtca ccaccactc cctcttcagt
 240
 ctggcggtcg ctttagggca ggccatctgc caggtcattg cggtttatct cgcgctcag
 300

gtggcgatgg gaatgggccc tgacgttcgc gacgccatct tcacccgcac ccttgacttc
 360
 tcggccccgg agatcaacaa attcggagca ccatcactca ttacccggac taccaacgac
 420
 gtccag
 426

<210> 1158
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 1158
 Val Leu Ala Lys Leu Val Thr Arg His Leu Arg Ala Tyr Arg Leu His
 1 5 10 15
 Val Ala Val Ile Ile Val Met Gln Val Cys Ala Gln Ile Ala Ala Leu
 20 25 30
 Thr Leu Pro Thr Ile Asn Ala Asp Ile Ile Asn Lys Gly Val Val Thr
 35 40 45
 Ala Asp Thr Gly Tyr Val Thr Thr His Ser Leu Phe Met Leu Ala Val
 50 55 60
 Ala Leu Gly Gln Ala Ile Cys Gln Val Ile Ala Val Tyr Leu Ala Ala
 65 70 75 80
 Gln Val Ala Met Gly Met Gly Arg Asp Val Arg Asp Ala Ile Phe Thr
 85 90 95
 Arg Thr Leu Asp Phe Ser Ala Arg Glu Ile Asn Lys Phe Gly Ala Pro
 100 105 110
 Ser Leu Ile Thr Arg Thr Thr Asn Asp Val Gln
 115 120

<210> 1159
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 1159
 tctctccgac cgcgcctggg gcccggtggg gtccctgcggg gacgcggggc aggacggcgc
 60
 ggacgaggca ggagcaggcc gggctctcgc catgggtcac tgcgcctct gccacgggaa
 120
 gttttcctcg agaagcctgc gcagcatctc cgagaggggc cctggagcga gcatggagag
 180
 gccatccgca gaggagcgcg tgctcgtacg ggacttccag cgctgcttg gtgtggctgt
 240
 ccgccaggac cccacettgt ctccgtttgt ctgcaagagc tgccacgccc agttctacca
 300
 gtgccacagc cttctcaagt ccttcctgca gagggtcaac gcctccccgg ctggtcgccg
 360
 gaagccttgt gcaaaggctg gtgccagcc cccaacaggg gcagaggagg gagcgtgtct
 420
 ggtggatctg atca
 434

<210> 1160

<211> 114
 <212> PRT
 <213> Homo sapiens

<400> 1160
 Met Gly His Cys Arg Leu Cys His Gly Lys Phe Ser Ser Arg Ser Leu
 1 5 10 15
 Arg Ser Ile Ser Glu Arg Ala Pro Gly Ala Ser Met Glu Arg Pro Ser
 20 25 30
 Ala Glu Glu Arg Val Leu Val Arg Asp Phe Gln Arg Leu Leu Gly Val
 35 40 45
 Ala Val Arg Gln Asp Pro Thr Leu Ser Pro Phe Val Cys Lys Ser Cys
 50 55 60
 His Ala Gln Phe Tyr Gln Cys His Ser Leu Leu Lys Ser Phe Leu Gln
 65 70 75 80
 Arg Val Asn Ala Ser Pro Ala Gly Arg Arg Lys Pro Cys Ala Lys Val
 85 90 95
 Gly Ala Gln Pro Pro Thr Gly Ala Glu Glu Gly Ala Cys Leu Val Asp
 100 105 110
 Leu Ile

<210> 1161
 <211> 355
 <212> DNA
 <213> Homo sapiens

<400> 1161
 ctgcacacac accaggccac gcccacgagg acggccagtc agcatgcagc caatacaccc
 60
 acagagggat ggggagcagc cctcagtgcc agctccaaca ggcccactgc aggtcctgtc
 120
 actgcaccca aggagctgcc ttccatttca cctgacattt ccactaaggg cccagcgttt
 180
 atcattccag aagagcagca ggcagaacct tcacctcca agagctgcaa gtgcgctgtg
 240
 gcaggaaaag aagatctggc gtctgaagtc agctcctgct ctccaggaaa agagggacga
 300
 tgacatagga cttgagcaaa atgagagccc cgtgatggga gagaacacct gatca
 355

<210> 1162
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1162
 Met Gln Pro Ile His Pro Gln Arg Asp Gly Glu Gln Pro Ser Val Pro
 1 5 10 15
 Ala Pro Thr Gly Pro Leu Gln Val Leu Ser Leu His Pro Arg Ser Cys
 20 25 30
 Leu Pro Phe His Leu Thr Phe Pro Leu Arg Ala Gln Arg Leu Ser Phe
 35 40 45
 Gln Lys Ser Ser Arg Gln Asn Leu His Leu Pro Arg Ala Ala Ser Ala

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      50              55              60
Leu Trp Gln Glu Lys Lys Ile Trp Arg Leu Lys Ser Ala Pro Ala Leu
65              70              75              80
Gln Glu Lys Arg Asp Asp Asp Ile Gly Leu Glu Gln Asn Glu Ser Pro
      85              90              95
Val Met Gly Glu Asn Thr
      100

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<210> 1163
 <211> 466
 <212> DNA
 <213> Homo sapiens

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<400> 1163
ngcgcgccag gaagcgggag gtcagctgta caccaggggt aatagaactt ctaccctcag
60
aggagtcaaa gagaaggcag aactatggca ggaaagctcc ggaagtccca catccctgga
120
gtgagcatct ggcagctggg ggaggagatc cctgaaggct gcagcacgcc ggactttgag
180
cagaagcccc tcacctcgcc tctgccagag gggaaaaatg ctgtctttcg ggctgtggtc
240
tgtggggagc ccaggcccga ggtgcgttgg cagaactcca aaggtgacct cagtgattcc
300
agcaagtaca agatctcctc cagccctggc agcaaggagc acgtgctgca gatcaacaag
360
ctgacaggcg aggacacgga tctgtaccac tgcacagcag taaatgcgta cggagaggcc
420
gcttgctcag tgagactcac cgtcatcgaa gttggctttc ggaaga
466

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<210> 1164
 <211> 127
 <212> PRT
 <213> Homo sapiens

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<400> 1164
Met Ala Gly Lys Leu Arg Lys Ser His Ile Pro Gly Val Ser Ile Trp
1      5      10      15
Gln Leu Val Glu Glu Ile Pro Glu Gly Cys Ser Thr Pro Asp Phe Glu
20      25      30
Gln Lys Pro Val Thr Ser Ala Leu Pro Glu Gly Lys Asn Ala Val Phe
35      40      45
Arg Ala Val Val Cys Gly Glu Pro Arg Pro Glu Val Arg Trp Gln Asn
50      55      60
Ser Lys Gly Asp Leu Ser Asp Ser Ser Lys Tyr Lys Ile Ser Ser Ser
65      70      75      80
Pro Gly Ser Lys Glu His Val Leu Gln Ile Asn Lys Leu Thr Gly Glu
85      90      95
Asp Thr Asp Leu Tyr His Cys Thr Ala Val Asn Ala Tyr Gly Glu Ala
100      105      110
Ala Cys Ser Val Arg Leu Thr Val Ile Glu Val Gly Phe Arg Lys
115      120      125

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<210> 1165
 <211> 414
 <212> DNA
 <213> Homo sapiens

<400> 1165
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 60
 tgcttttagta aagtccttgt tgagccgcgt ctgctcaagc tcaacttgac nattatgtgt
 120
 ctgcacattc tgctgatgtc cacgttcgtg gccctgcccc gtcagttggc tgcagcagga
 180
 ttccccgccg ctgaacactg gaaagtgtat ctggtgacga tgctcatctc cttcgtctcc
 240
 gttgtccctt tcattatcta tgcagaagtg aaacgccgca tgaagcgcgt attcctgacg
 300
 tgtgttgccg tgctgttgat tgccgaaatc gtactatggg gctccgggcc acacttctgg
 360
 gaactgggtca tcggcgtaga gcttttcttc ctgccttta atctcatgga agcc
 414

<210> 1166
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 1166
 Trp Val Val Pro Asp Thr Xaa Asn His Val Leu Asn Arg Ile Ser Gly
 1 5 10 15
 Met Val Lys Gly Cys Phe Ser Lys Val Leu Val Glu Pro Arg Leu Leu
 20 25 30
 Lys Leu Asn Leu Thr Ile Met Cys Leu His Ile Leu Leu Met Ser Thr
 35 40 45
 Phe Val Ala Leu Pro Gly Gln Leu Ala Ala Ala Gly Phe Pro Ala Ala
 50 55 60
 Glu His Trp Lys Val Tyr Leu Val Thr Met Leu Ile Ser Phe Val Ser
 65 70 75 80
 Val Val Pro Phe Ile Ile Tyr Ala Glu Val Lys Arg Arg Met Lys Arg
 85 90 95
 Val Phe Leu Thr Cys Val Ala Leu Leu Ile Ala Glu Ile Val Leu
 100 105 110
 Trp Gly Ser Gly Pro His Phe Trp Glu Leu Val Ile Gly Val Gln Leu
 115 120 125
 Phe Phe Leu Ala Phe Asn Leu Met Glu Ala
 130 135

<210> 1167
 <211> 464
 <212> DNA
 <213> Homo sapiens

<400> 1167
 gtcgaccccc tgggcaagag tcgcggcccc tgacgataac ttcacccccg cggccttgag
 60

ctgttgggac cggctggcta aggcctgggc accggtagcg gcctgggtgga taccctcatg
 120
 tagccgggtg acctgcctga ccatcttcgg caaaccagtg cgcagttgtg tggatgaactc
 180
 attgaccctt cgagacagtc gtgaggaacc gtcagcaagt tcgtcgatgc cgtcgatgat
 240
 gctcttgcca gagttcggat ccttgatcgc catcgccctg acggccaccc ccgaccacgc
 300
 ccgcacgccc agggcggtacc catcggtcat cgcgtcgcg acgatgggta ccaggtcgtg
 360
 gcattcctgc ggggtgtggc ttgcacgca tcgacgcagg aagtcagcct cgtcccggtg
 420
 cagggtctcc ttactaagtt ccgcgggttt ctttcccgcg gcgt
 464

<210> 1168
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1168
 Met Thr Asp Gly Tyr Ala Leu Gly Val Arg Ala Gly Ser Gly Val Ala
 1 5 10 15
 Val Lys Ala Met Ala Ile Lys Asp Pro Asn Ser Gly Lys Ser Ile Asp
 20 25 30
 Asp Gly Ile Asp Glu Leu Ala Asp Gly Ser Ser Arg Leu Ser Arg Gly
 35 40 45
 Val Asn Glu Phe Thr Thr Gln Leu Arg Thr Gly Leu Pro Lys Met Val
 50 55 60
 Arg Gln Val Thr Arg Leu His Glu Gly Ile His Gln Ala Ala Thr Gly
 65 70 75 80
 Ala Gln Ala Leu Ala Ser Arg Ser Gln Gln Leu Lys Ala Gly Gly Val
 85 90 95
 Lys Leu Ser Ser Gly Ala Ala Thr Leu Ala His Gly Val Asp
 100 105 110

<210> 1169
 <211> 486
 <212> DNA
 <213> Homo sapiens

<400> 1169
 nacgcgtgaa gggagcagaa cggacaccag ttactagtgg ctctgggtcgg ggacagcctc
 60
 ctagagcctt tctggccaat gggaacagga atagcccggg gctttctagc tgctatggac
 120
 tctgcctgga tgggtccgaag ttggtctcta ggaacgagcc ctttggaagt gctggcagag
 180
 agggaaagta ttacaggtt gctgcctcag accaccctg agaatgtgag taagaacttc
 240
 agccagtaca gtatcgaccc tgtcactcgg tatcccaata tcaacgtcaa cttcctccgg
 300
 ccaagccagg tgcgccattt atatgatact ggcgaaacaa aagatattca cctggaaatg
 360

gagagcctgg tgaattcccg aaccaccccc aaattgactc gcaatgagtc tgtagctcgt
 420
 tcaagcaaac tgctgggttg gtgccagagg cagacagatg gctatgcagg ggtaaactg
 480
 acagat
 486

<210> 1170
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 1170
 Arg Glu Gln Asn Gly His Gln Leu Leu Val Ala Leu Val Gly Asp Ser
 1 5 10 15
 Leu Leu Glu Pro Phe Trp Pro Met Gly Thr Gly Ile Ala Arg Gly Phe
 20 25 30
 Leu Ala Ala Met Asp Ser Ala Trp Met Val Arg Ser Trp Ser Leu Gly
 35 40 45
 Thr Ser Pro Leu Glu Val Leu Ala Glu Arg Glu Ser Ile Tyr Arg Leu
 50 55 60
 Leu Pro Gln Thr Thr Pro Glu Asn Val Ser Lys Asn Phe Ser Gln Tyr
 65 70 75 80
 Ser Ile Asp Pro Val Thr Arg Tyr Pro Asn Ile Asn Val Asn Phe Leu
 85 90 95
 Arg Pro Ser Gln Val Arg His Leu Tyr Asp Thr Gly Glu Thr Lys Asp
 100 105 110
 Ile His Leu Glu Met Glu Ser Leu Val Asn Ser Arg Thr Thr Pro Lys
 115 120 125
 Leu Thr Arg Asn Glu Ser Val Ala Arg Ser Ser Lys Leu Leu Gly Trp
 130 135 140
 Cys Gln Arg Gln Thr Asp Gly Tyr Ala Gly Val Asn Val Thr Asp
 145 150 155

<210> 1171
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 1171
 acgcgttcaa caaagcacag aaccggagat gcagtgggag ccgagagcag gaagcgcgga
 60
 ggacgcgcca ggtgctggcg ctgcccagagg ccccgtagca agtggggccc atagcagccg
 120
 actcgctaga ccctcccaaa acgcacacca cgcgcgacca ggaccgagag gcccgcacgg
 180
 ccctgctagg ccacaaacac tccactgtct ccagggtaaa agacaaacac agcctcgctt
 240
 gtccctccaa gagtacaacc tctgtctgat gaaaaacaaa cgaccagag aggaggcagc
 300
 tgccgggaca ctgcaggctg ggcccgcgc gcccttgag ggcagggtcaa aatcccggaa
 360
 caggcacagt gttcaggctg attgactgtc ccaggccagg gcggcctcaa ctgccagagc
 420

acctcctac
429

<210> 1172
<211> 118
<212> PRT
<213> Homo sapiens

<400> 1172
Met Gln Trp Glu Pro Arg Ala Gly Ser Ala Glu Ala Ala Pro Gly Ala
1 5 10 15
Gly Ala Ala Arg Gly Pro Val Pro Ser Gly Ala His Ser Ser Arg Leu
20 25 30
Ala Arg Pro Ser Gln Asn Ala His Ala Arg Pro Gly Pro Arg Gly
35 40 45
Pro His Gly Pro Ala Arg Pro Gln Thr Leu His Cys Leu Gln Gly Lys
50 55 60
Arg Gln Thr Gln Pro Arg Leu Ser Leu Gln Glu Tyr Asn Leu Cys Leu
65 70 75 80
Met Lys Asn Lys Arg Pro Arg Glu Glu Ala Ala Ala Gly Thr Leu Gln
85 90 95
Ala Gly Pro Ala Ala Pro Leu Glu Gly Arg Ser Lys Ser Arg Asn Arg
100 105 110
His Ser Val Gln Ala Asp
115

<210> 1173
<211> 435
<212> DNA
<213> Homo sapiens

<400> 1173
cgcgctcaatg acgacggcga gcattctgcc gagcaggtga tgcgagccac ccgcggtgct
60
ggacttgggg ccgaggccaa gcgtcgcatc atcttgggta cctatgcctt gtcggctggg
120
tactatgacg cctactacgg ctcggtcag aaagtccgta cctcatcca acgcgacttc
180
gagaaagcat ggcagatgtg cgatgtgctc gtgtcaccgg ccacgccaac gactgccttc
240
cggctgggtg agcgtactgc tgacccgatg gcgatgtacc gctccgatct atgcacggtc
300
ccggccaata tggccggaag tcccgcagga tctttcccga tcggtctatc agagaccgac
360
ggcatgcccc tcggcatgca ggtgatggcg ccaatcatgg cggacgatcg aatctaccga
420
gttggggccg ctcta
435

<210> 1174
<211> 145
<212> PRT
<213> Homo sapiens

<400> 1174

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Arg Val Asn Asp Asp Gly Glu His Ser Ala Glu Gln Val Met Arg Ala
 1             5             10             15
Thr Arg Gly Ala Gly Leu Gly Ala Glu Ala Lys Arg Arg Ile Ile Leu
          20             25             30
Gly Thr Tyr Ala Leu Ser Ala Gly Tyr Tyr Asp Ala Tyr Tyr Gly Ser
          35             40             45
Ala Gln Lys Val Arg Thr Leu Ile Gln Arg Asp Phe Glu Lys Ala Trp
          50             55             60
Gln Met Cys Asp Val Leu Val Ser Pro Ala Thr Pro Thr Thr Ala Phe
65             70             75             80
Arg Leu Gly Glu Arg Thr Ala Asp Pro Met Ala Met Tyr Arg Ser Asp
          85             90             95
Leu Cys Thr Val Pro Ala Asn Met Ala Gly Ser Pro Ala Gly Ser Phe
          100            105            110
Pro Ile Gly Leu Ser Glu Thr Asp Gly Met Pro Val Gly Met Gln Val
          115            120            125
Met Ala Pro Ile Met Ala Asp Asp Arg Ile Tyr Arg Val Gly Ala Ala
          130            135            140
Leu
145

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<210> 1175

<211> 729

<212> DNA

<213> Homo sapiens

<400> 1175

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gatcgcaactg caatccaccc acatctactt gatatgaaaa ttggtcaagg caaatatgag
60
caggggttct ttccaaagtt acagtccgat gtcttggcaa caggaccaac cagtaacaat
120
cgctgggttaa gtcggagtgc cactgcacag cgcaggaaaag gacgccttcg ccagcattct
180
gagcatgttg ggctggacaa cgacttgagg gagaaatata tgcaagaggc acgaagttaa
240
ggaaaaaacc tgaggcaacc caaactgtca gacctctctc ctgcagttat tgcacagacc
300
aactgtaaat tcgtagaagg cttattaaaa gaatgtagaa ataagacaaa gcgcatgttg
360
gtggagaaga tgggacatga agcggtgga cttggccatg gagaagcaaa catcacgggc
420
ctggaggaga acaccttgat cgccagcctt tgtgacctgc tggagaggat atggagccat
480
ggcttgcagg tcaagcaggg gaagtcggtt ttgtggtcac atttaattcc ttttcaggac
540
agagaagaga accaagagcc ccttgcagaa tcaccagttg ccctcggacc agaaagaaaa
600
aaatctgact caggagttat gttgccaacg ctccaggtct ctcttattca ggacatgagg
660
catattcaaa acatgagtga gatcaagact gatgttggac gagctcgggc gtggataaga
720
ctgtctcta
729

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<210> 1176
 <211> 243
 <212> PRT
 <213> Homo sapiens

<400> 1176
 Asp Arg Thr Ala Ile His Pro His Leu Leu Asp Met Lys Ile Gly Gln
 1 5 10 15
 Gly Lys Tyr Glu Gln Gly Phe Phe Pro Lys Leu Gln Ser Asp Val Leu
 20 25 30
 Ala Thr Gly Pro Thr Ser Asn Asn Arg Trp Val Ser Arg Ser Ala Thr
 35 40 45
 Ala Gln Arg Arg Lys Gly Arg Leu Arg Gln His Ser Glu His Val Gly
 50 55 60
 Leu Asp Asn Asp Leu Arg Glu Lys Tyr Met Gln Glu Ala Arg Ser Leu
 65 70 75 80
 Gly Lys Asn Leu Arg Gln Pro Lys Leu Ser Asp Leu Ser Pro Ala Val
 85 90 95
 Ile Ala Gln Thr Asn Cys Lys Phe Val Glu Gly Leu Leu Lys Glu Cys
 100 105 110
 Arg Asn Lys Thr Lys Arg Met Leu Val Glu Lys Met Gly His Glu Ala
 115 120 125
 Val Glu Leu Gly His Gly Glu Ala Asn Ile Thr Gly Leu Glu Glu Asn
 130 135 140
 Thr Leu Ile Ala Ser Leu Cys Asp Leu Leu Glu Arg Ile Trp Ser His
 145 150 155 160
 Gly Leu Gln Val Lys Gln Gly Lys Ser Val Leu Trp Ser His Leu Ile
 165 170 175
 Pro Phe Gln Asp Arg Glu Glu Asn Gln Glu Pro Leu Ala Glu Ser Pro
 180 185 190
 Val Ala Leu Gly Pro Glu Arg Lys Lys Ser Asp Ser Gly Val Met Leu
 195 200 205
 Pro Thr Leu Arg Val Ser Leu Ile Gln Asp Met Arg His Ile Gln Asn
 210 215 220
 Met Ser Glu Ile Lys Thr Asp Val Gly Arg Ala Arg Ala Trp Ile Arg
 225 230 235 240
 Leu Ser Leu

<210> 1177
 <211> 581
 <212> DNA
 <213> Homo sapiens

<400> 1177
 acgcgtgatg agttgcgcga gaccagcaac tgcagccgaa tacagttttc ttgtgtaccc
 60
 cgtcgcacag ctgcgagagg tgggcattgc cgagtgaggc aacgatgtct aaggcggaaa
 120
 gctcatcctc ggcagacggg aagactttgt cgtcggggat gttgtcaatg agagcgggga
 180
 cgtcgatctc ggtactgccc atggcgatcat gaaggatcgc gcgatacggg gcgacgaccc
 240

cgatgagggc gtcgtcgaat ccagcgatga tcgataacctc tctcggtagc acgtccgtgg
 300
 ccaacaggtg gtcgacttgg gcgggggcta gccatgtaat tgttccgagc acatggaggg
 360
 tggctgccag gaggcggatg gccggttctg gggcatcttt ggagatcttc agccggacat
 420
 cagtgggcag tccggccggg acttggcaga gggcctgggc gggatgggag cgctgggcga
 480
 cgacgaaacg ccccgacgcc gtaacgccgt gggcttggag atcgcaggtc cacttctctg
 540
 ggctttcacc ggcagagatc atggtgtgga ccaccattgt g
 581

<210> 1178

<211> 192

<212> PRT

<213> Homo sapiens

<400> 1178

Met	Val	Val	His	Thr	Met	Ile	Ser	Ala	Gly	Glu	Ser	Pro	Glu	Lys	Trp
1				5					10					15	
Thr	Cys	Asp	Leu	Gln	Ala	His	Gly	Val	Thr	Ala	Ser	Gly	Arg	Phe	Val
			20					25					30		
Val	Ala	Gln	Arg	Ser	His	Pro	Ala	Gln	Ala	Leu	Cys	Gln	Val	Pro	Ala
		35					40					45			
Gly	Leu	Pro	Thr	Asp	Val	Arg	Leu	Lys	Ile	Ser	Lys	Asp	Ala	Pro	Glu
	50					55				60					
Pro	Ala	Ile	Arg	Leu	Leu	Ala	Ala	Thr	Leu	His	Val	Leu	Gly	Thr	Ile
65				70					75					80	
Thr	Trp	Leu	Ala	Pro	Ala	Gln	Val	Asp	His	Leu	Leu	Ala	Thr	Asp	Val
			85					90					95		
Leu	Pro	Arg	Glu	Val	Ser	Ile	Ile	Ala	Gly	Phe	Asp	Asp	Ala	Leu	Ile
		100						105					110		
Gly	Val	Val	Ala	Pro	Tyr	Arg	Ala	Ile	Leu	His	Asp	Ala	Met	Gly	Ser
		115					120					125			
Thr	Glu	Ile	Asp	Val	Pro	Ala	Leu	Ile	Asp	Asn	Ile	Pro	Asp	Asp	Lys
	130					135					140				
Val	Phe	Pro	Ser	Ala	Glu	Asp	Glu	Leu	Ser	Ala	Leu	Asp	Ile	Val	Ala
145				150						155				160	
Ser	Leu	Gly	Asn	Ala	His	Leu	Ser	Gln	Leu	Cys	Asp	Gly	Val	His	Lys
			165					170					175		
Lys	Thr	Val	Phe	Gly	Cys	Ser	Cys	Trp	Ser	Arg	Ala	Thr	His	His	Ala
		180						185					190		

<210> 1179

<211> 597

<212> DNA

<213> Homo sapiens

<400> 1179

gtgcactttc tggcttctaa ctgtggcccc agccctgact ccttgaggtg ctccctgtgct
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 gattggggct tctggacatg ctgccacaag atgtctggaa actccagggg gcacctgccg
 120

agaccctgcc ctgggaacgg ccggaagaat cccaaaacat gagattccgg tgcagctgag
 180
 ccccgccaat tcattgtctc ttccagtcce ttctgaaggc tgcatttggc aatgtgaccc
 240
 tcgggggtggg gaaggcatca gaggaataca ggctatggga cgccagaggc agcgtcctgg
 300
 ggacaaagcc cacttcttcc catgcccagg gcttctctcat ggaccagca tgggtggacgt
 360
 ggccctcaga cgtccatggg tgggtggggga ggcacgtgct gtttggccct gtctctgctc
 420
 agagtctcat aggaagatgc atgggtccaca caacagttag tcggcagggg gtccaggctt
 480
 cccctcccaa ccagtgggtg tgagacgctt ggtttataac ccaagatccc ttgtcccatt
 540
 ggtgctcct gaatctccca cctcccgagg cacctgcatg gcctctacct gacgcgt
 597

<210> 1180
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 1180
 Met Gly Arg Gln Arg Gln Arg Pro Gly Asp Lys Ala His Phe Phe Pro
 1 5 10 15
 Cys Pro Gly Leu Pro His Gly Pro Ser Met Val Asp Val Ala Leu Arg
 20 25 30
 Arg Pro Trp Val Val Gly Glu Ala Arg Ala Val Trp Pro Cys Leu Cys
 35 40 45
 Ser Glu Ser His Arg Lys Met His Gly Pro His Asn Ser Glu Ser Ala
 50 55 60
 Gly Ser Pro Gly Phe Pro Ser Gln Pro Val Val Leu Arg Arg Leu Val
 65 70 75 80
 Tyr Asn Pro Arg Ser Leu Val Pro Leu Val Pro Pro Glu Ser Pro Thr
 85 90 95
 Ser Arg Gly Thr Cys Met Ala Ser Thr
 100 105

<210> 1181
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 1181
 gtcgactacc tcgatgttcc cccgcgtcag atggtctccg tggctactgc catgattccg
 60
 ttccctcgagc acgacgacgc taaccgtgcc ctgatgggtg cgaacatgca gcgtcaggct
 120
 gtgccgctgc tgcgttcgga ggctccgttc gtcgggtaccg gtatggagca gcgtgctgct
 180
 tacgacgccg gcgatgtcat tgtcgcttcg gccacaggtg tggctcgagac cgtgtcggca
 240
 ggcttcatca ccatcatgga cgatgagggc cagcgccaca cctacctgct ggcgaagttc
 300

gagcgcacca accagggcac ctgctacaac cagaagccac tgttgacgag gg
352

<210> 1182

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1182

Val	Asp	Tyr	Leu	Asp	Val	Ser	Pro	Arg	Gln	Met	Val	Ser	Val	Ala	Thr
1				5					10					15	
Ala	Met	Ile	Pro	Phe	Leu	Glu	His	Asp	Asp	Ala	Asn	Arg	Ala	Leu	Met
			20					25					30		
Gly	Ala	Asn	Met	Gln	Arg	Gln	Ala	Val	Pro	Leu	Leu	Arg	Ser	Glu	Ala
		35					40					45			
Pro	Phe	Val	Gly	Thr	Gly	Met	Glu	Gln	Arg	Ala	Ala	Tyr	Asp	Ala	Gly
	50					55					60				
Asp	Val	Ile	Val	Ala	Ser	Ala	Thr	Gly	Val	Val	Glu	Thr	Val	Ser	Ala
65					70				75					80	
Gly	Phe	Ile	Thr	Ile	Met	Asp	Asp	Glu	Gly	Gln	Arg	His	Thr	Tyr	Leu
				85					90					95	
Leu	Arg	Lys	Phe	Glu	Arg	Thr	Asn	Gln	Gly	Thr	Cys	Tyr	Asn	Gln	Lys
			100					105						110	
Pro	Leu	Leu	Thr	Arg											
			115												

<210> 1183

<211> 432

<212> DNA

<213> Homo sapiens

<400> 1183

gaccccttctg ggcgctggtc caagcgcgtg gtgaggccgt cctctcctgc agaaccccg
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cctcttcgcc cctgcccgct cactgtttct gtctgtctca cctctccag gaagcctgcc
120
tggccttctc catgctgatg ggcgtggccc ttgtccctgc agccatgcat tgacctcgt
180
ggctcctgga ggccaggcca cgctctcatc cctctgggt gagtgagagg cacagcctgg
240
gtgcgtgggg ccgtggcggc tccgagggc caccgctgtg tcctctcatg agtgggtgcc
300
gtccaggtct gtctggggt ggctgagagg aggaggttgg cctcgcgagg ccatgtgcgt
360
gacagtggag acatcgccag cctctgtctt gcacagctga cggcagcccc tctctctcca
420
gccatgtccc ca
432

<210> 1184

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1184

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Met Ala Gly Glu Arg Gly Ala Ala Val Ser Cys Ala Ser Arg Arg Leu
 1           5           10           15
Ala Met Ser Pro Leu Ser Arg Thr Trp Pro Arg Glu Ala Asn Leu Leu
          20           25           30
Leu Ala Ala Ser Pro Gly Gln Thr Trp Thr Ala Pro Thr His Glu Arg
      35           40           45
Thr Gln Arg Trp Arg Leu Gly Ala Ala Thr Ala Pro Arg Thr Gln Ala
      50           55           60
Val Pro Leu Thr His Pro Glu Gly Met Arg Thr Trp Pro Gly Leu Gln
      65           70           75           80
Glu Pro Arg Arg Ser Met His Gly Cys Arg Asp Lys Gly His Ala His
          85           90           95
Gln His Gly Glu Gly Gln Ala Gly Phe Leu Glu Glu Val Ser Arg Thr
          100          105          110
Glu Gln Val Ser Gly Gln Gly Arg Gly Arg Gly Ser Ala Gly Glu
          115          120          125
Asp Gly Leu Thr Thr Arg Leu Asp Gln Arg Pro Glu Gly
      130           135           140

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<210> 1185

<211> 423

<212> DNA

<213> Homo sapiens

<400> 1185

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accggtgaat ttggccttaa cagcgatgga actcctggcc catcttatga acctggcatg
60
gaattacgcg gcaaatatgt attgttgggt gaagggtgtac ggggctctct atctaaacaa
120
gtcatcaata aataccaatt atccgagggt catgaaccac aaaagttcgg ccttggttta
180
aaagaaattht gggaaataga cccagaaaaa cacaagaag gcagagtcag tcataccatg
240
ggctggccat taaatggcaa tgctggcggc ggttctttta tttatcatgc agaaaaaat
300
caagtcttta tcggctttgt ggtgcattt aattacgcca acccttacct atccccttac
360
caagaatttc aacgctttta acaccatccg attatcgcg agctattaac tggcggtaaa
420
cgc
423

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<210> 1186

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1186

```

Thr Gly Glu Phe Gly Leu Asn Ser Asp Gly Thr Pro Gly Pro Ser Tyr
 1           5           10           15
Glu Pro Gly Met Glu Leu Arg Gly Lys Tyr Val Leu Leu Gly Glu Gly
          20           25           30
Val Arg Gly Ser Leu Ser Lys Gln Val Ile Asn Lys Tyr Gln Leu Ser

```



```

          35          40          45
Glu Gly His Glu Pro Gln Lys Phe Gly Leu Gly Leu Lys Glu Ile Trp
   50          55          60
Glu Ile Asp Pro Glu Lys His Lys Glu Gly Arg Val Ser His Thr Met
65          70          75          80
Gly Trp Pro Leu Asn Gly Asn Ala Gly Gly Gly Ser Phe Ile Tyr His
          85          90          95
Ala Glu Asn Asn Gln Val Phe Ile Gly Phe Val Val His Leu Asn Tyr
          100          105          110
Ala Asn Pro Tyr Leu Ser Pro Tyr Gln Glu Phe Gln Arg Phe Lys His
          115          120          125
His Pro Ile Ile Ala Glu Leu Leu Thr Gly Gly Lys Arg
          130          135          140

```

<210> 1187
 <211> 387
 <212> DNA
 <213> Homo sapiens

```

<400> 1187
acgcgtgctg gtgagtttaa attgaatgct gatggtaatt tggtagcgaa ttcaggggct
60
aaggtccagg gctataatgc aatagatggc atagtcgggtg ggaacttaga agatatggta
120
gtacccactg ctgcaatttc tcctcaagca acatcaagtg ttgatttaaa agtgaatctt
180
aattccgaag gtgaggatgt gccgccttat attcgagcgg actttgatcc agccaatcca
240
gatacttatg actatactca gacccaaacg gttgcggatg ggagtggtaa taatcattta
300
attagttatt actatgctaa aagtgatgta gcaaatacct atcaggttta tgccacggta
360
gatgggaagt cgactgatga taccggt
387

```

<210> 1188
 <211> 129
 <212> PRT
 <213> Homo sapiens

```

<400> 1188
Thr Arg Ala Gly Glu Phe Lys Leu Asn Ala Asp Gly Asn Leu Val Thr
   1           5           10           15
Asn Ser Gly Ala Lys Val Gln Gly Tyr Asn Ala Ile Asp Gly Ile Val
   20           25           30
Gly Gly Asn Leu Glu Asp Met Val Val Pro Thr Ala Arg Ile Ser Pro
   35           40           45
Gln Ala Thr Ser Ser Val Asp Leu Lys Val Asn Leu Asn Ser Glu Gly
   50           55           60
Glu Asp Val Pro Pro Tyr Ile Arg Ala Asp Phe Asp Pro Ala Asn Pro
65           70           75           80
Asp Thr Tyr Asp Tyr Thr Gln Thr Gln Thr Val Ala Asp Gly Ser Gly
   85           90           95
Asn Asn His Leu Ile Ser Tyr Tyr Tyr Ala Lys Ser Asp Val Ala Asn

```

100 105 110
 Thr Tyr Gln Val Tyr Ala Thr Val Asp Gly Lys Ser Thr Asp Asp Thr
 115 120 125
 Gly

<210> 1189
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1189
 tcgatcgccg accgcccggg ccttgccccc ggcgatgatcg gtggcctggt ggccagcacc
 60
 ctgggtgctg gtttcattgg cggcatcggt gcaggttttc tggccgggta cagcgccaag
 120
 gccattgccc gctgggcacg gctgcccagc agcctggatg cgctcaaacc gattctgac
 180
 atttcgctgc tggccagcct gtccactggg ttggtgatga tctacgtggt cggccagccg
 240
 gtggcgggcca tgctcggagg cctgacacac tttctcgaca gcatgggtac caccaacgcc
 300
 attctcctgg gcntgttgct cggcggctag
 330

<210> 1190
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 1190
 Ser Ile Ala Asp Arg Pro Gly Leu Ala Pro Gly Met Ile Gly Gly Leu
 1 5 10 15
 Leu Ala Ser Thr Leu Gly Ala Gly Phe Ile Gly Gly Ile Val Ala Gly
 20 25 30
 Phe Leu Ala Gly Tyr Ser Ala Lys Ala Ile Ala Arg Trp Ala Arg Leu
 35 40 45
 Pro Ser Ser Leu Asp Ala Leu Lys Pro Ile Leu Ile Ile Ser Leu Leu
 50 55 60
 Ala Ser Leu Phe Thr Gly Leu Val Met Ile Tyr Val Val Gly Gln Pro
 65 70 75 80
 Val Ala Ala Met Leu Gly Gly Leu Thr His Phe Leu Asp Ser Met Gly
 85 90 95
 Thr Thr Asn Ala Ile Leu Leu Gly Xaa Leu Leu Gly Gly
 100 105

<210> 1191
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 1191
 cggccgacga tgtgcgggtga gcaagagatt tggagagcca tgatgacgtc agcagacaaa
 60

gcaggggacta acggacagac catgcagaca ccgccggtgg tgtcgccgca ggactgggag
 120
 gcagcccgtc agcaactgct cgtgaaggaa aaggcgcata cccgtgcccc cgacgcactc
 180
 gccgccgaac ggaggcgcat gccgtggatg gaagtgacaa aaacctacgc attcgaggcg
 240
 ccttcgggca aggccagtct gctcgatctg ttccagggcc ggaagcagct gatcctgtac
 300
 cgggccttct tcgagccggg cgtgttcggc tggcccgacc atgcctgccg c
 351

<210> 1192

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1192

Met	Cys	Gly	Glu	Gln	Glu	Ile	Trp	Arg	Ala	Met	Met	Thr	Ser	Ala	Asp
1				5					10				15		
Lys	Ala	Gly	Thr	Asn	Gly	Gln	Thr	Met	Gln	Thr	Pro	Pro	Val	Val	Ser
			20					25					30		
Pro	Gln	Asp	Trp	Glu	Ala	Ala	Arg	Gln	Gln	Leu	Leu	Val	Lys	Glu	Lys
		35					40					45			
Ala	His	Thr	Arg	Ala	Arg	Asp	Ala	Leu	Ala	Ala	Glu	Arg	Arg	Arg	Met
	50					55					60				
Pro	Trp	Met	Glu	Val	Thr	Lys	Thr	Tyr	Ala	Phe	Glu	Ala	Pro	Ser	Gly
65					70					75				80	
Lys	Ala	Ser	Leu	Leu	Asp	Leu	Phe	Gln	Gly	Arg	Lys	Gln	Leu	Ile	Leu
			85						90				95		
Tyr	Arg	Ala	Phe	Phe	Glu	Pro	Gly	Val	Phe	Gly	Trp	Pro	Asp	His	Ala
			100					105					110		

Cys Arg

<210> 1193

<211> 722

<212> DNA

<213> Homo sapiens

<400> 1193

ggatcccagc ctccagatcc catcttgtag ctcttctttc tctacactna ggttgctccc
 60
 cgacttagga cgcccagttt gtactcagtg tttgctcttt tatggcagag cctctgcact
 120
 cccagcctcc tggccccttc tgtacatgat tttccttggt gccactccat gcatttttct
 180
 tggctcagga cttagtgggc ctccatggga cttggtacct ctacttggtc ccttctggaa
 240
 tctgtaactt tgtgttcccc accattcttt cttttatgaa ccgatggtgc aacagcatga
 300
 ctacctgaaa ttcttagtca ctcccagctg ctttagtgga gggaaaatgc ccacagcaca
 360
 ggaaatagtc ctgcccttcg agagaggcca ggggatggga gcgtgtccag agaaggcgca
 420

tgggttgatg aagggtggcc acagcgcccg ggaggaaggg gccagaacgc tctctgttct
 480
 gttccatgag gaggattatg ttggtgtgtg tagtcccctg gttcagagtt gtccagaaat
 540
 agctcagtgt aaggaacaat ttcccaaaga tcaaaagagc tgtctcaaga tagcagtgcg
 600
 tttccagccc ctacaggtgt atacagcaca aaggggaggga ccccttagtg tggctgtcac
 660
 agaggggaagt ggacgtcctg tggtttgacc ccaccagatg gctttagaga tctggggccc
 720
 ag
 722

<210> 1194
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 1194
 Met Val Gln Gln His Asp Tyr Leu Lys Phe Leu Val Thr Pro Ser Cys
 1 5 10 15
 Phe Ser Gly Gly Lys Met Pro Thr Ala Gln Glu Ile Val Leu Pro Phe
 20 25 30
 Glu Arg Gly Gln Gly Met Gly Ala Cys Pro Glu Lys Gly Asp Gly Leu
 35 40 45
 Met Lys Gly Gly His Ser Ala Arg Glu Glu Gly Ala Arg Thr Leu Ser
 50 55 60
 Val Leu Phe His Glu Glu Asp Tyr Val Gly Val Cys Ser Pro Leu Val
 65 70 75 80
 Gln Ser Cys Pro Glu Ile Ala Gln Cys Lys Glu Gln Phe Ser Lys Asp
 85 90 95
 Gln Lys Ser Cys Leu Lys Ile Ala Val Arg Ser Gln Pro Leu Gln Val
 100 105 110
 Tyr Thr Ala Gln Arg Glu Gly Pro Pro Ser Val Ala Val Thr Glu Gly
 115 120 125
 Ser Gly Arg Pro Val Val
 130

<210> 1195
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 1195
 tctagagcat gatattccgc gggcgcgccc ggggtggactt tggttcgaga gtggaactaa
 60
 gtgagtaatg ggggcgcgcg gccagacgc gctcccagcc tcttggcgag agtgtgccc
 120
 gggtttcccg gggcacggga gtgtgtctag gaggggaggc caggatcctt cctcgagtcc
 180
 tgtcctgaac aaaagaaaac gaggtgggtg gtgcttgaac ggccctgttt actctgcaga
 240
 tagccgaact ggtaggactc cggcgcgccc tatttatctt gattggctct gcctgaaggg
 300

aagcgtaaat cccgtccaac ctgtatcact gcgaagagct cgttcgggag cgctttttgg
 360
 aaatgcagat tcttagcccc caccagatc t
 391

<210> 1196
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1196
 Met Gly Ala Ala Arg Pro Asp Ala Leu Pro Ala Ser Trp Arg Glu Cys
 1 5 10 15
 Cys Pro Val Ser Arg Gly His Gly Ser Val Ser Arg Arg Gly Gly Gln
 20 25 30
 Asp Pro Ser Ser Ser Pro Val Leu Asn Lys Arg Lys Arg Gly Gly Trp
 35 40 45
 Cys Leu Asn Gly Pro Val Tyr Ser Ala Asp Ser Arg Thr Gly Arg Thr
 50 55 60
 Pro Ala Arg Pro Ile Tyr Leu Asp Trp Leu Cys Leu Lys Ala Ser Val
 65 70 75 80
 Asn Pro Val Gln Pro Val Ser Leu Arg Arg Ala Arg Ser Gly Ala Leu
 85 90 95
 Phe Gly Asn Ala Asp Ser
 100

<210> 1197
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 1197
 acgcgtagtg atcatgaaaa tggtagacag cgtctagcag aagtcgcctc tgtgatgggc
 60
 tggcagcaag atgaaatcat cgtaaagcga caaggggatg aaccctttct gcctgttgca
 120
 cttattcatg ccacgggttaa agcggttagcc gatgatgctg aatctgaaat ggccacgatt
 180
 gcctgtgcga ttgataacgt agcagagctg ttttaaccaa atgtagttaa agtcgtttgt
 240
 gatgaaaaac agcgcgcctt gtatttcagt cgtgcgccta tgccatggga ccgtaatggt
 300
 tttatggaaa aaacagacga tcaagcgtaa ccagcggatt ttctcgctt gcgtcatatt
 360
 ggtccgtatg tttaccgcac gacatn
 386

<210> 1198
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 1198
 Thr Arg Asp Asp His Glu Asn Gly Thr Glu Arg Leu Ala Glu Val Ala

```

      1             5             10             15
Ser Val Met Gly Trp Gln Gln Asp Glu Ile Ile Val Asn Val Gln Gly
      20             25             30
Asp Glu Pro Phe Leu Pro Val Ala Leu Ile His Ala Thr Val Lys Ala
      35             40             45
Leu Ala Asp Asp Ala Glu Ser Glu Met Ala Thr Ile Ala Cys Ala Ile
      50             55             60
Asp Asn Val Ala Glu Leu Phe Asn Pro Asn Val Val Lys Val Val Cys
      65             70             75             80
Asp Glu Lys Gln Arg Ala Leu Tyr Phe Ser Arg Ala Pro Met Pro Trp
      85             90             95
Asp Arg Asn Gly Phe Met Glu Lys Thr Asp Asp Gln Ala Leu Pro Ala
      100            105            110
Asp Phe Pro Ala Leu Arg His Ile Gly Pro Tyr Val Tyr Arg Thr Thr
      115            120            125

```

<210> 1199

<211> 318

<212> DNA

<213> Homo sapiens

<400> 1199

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acgcgttcag cgtcatgtac agccccgggc cgggtcaattt gatgggcctc aatgccgggc
60
ttacgggcaa attgcgtcgc tccagcgggt tctacatcgg cgtgggggtgc gcgatgctgc
120
tgatggtcgg gctgggttggg ctcaccggcg aagcgatcat ctcccaggcg gcgctgccgt
180
atatttcctt gattggcggg gtgtacacgc tgtacctcgc ctaccagggtg ttcaccgcac
240
gtaccgaagt ggatgacgcc ccaagcgcg ctcgccaagac cttgaccttc tggaatggcc
300
tggtgatcca gttgctcc
318

```

<210> 1200

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1200

```

Met Tyr Ser Pro Gly Pro Val Asn Leu Met Gly Leu Asn Ala Gly Leu
      1             5             10             15
Thr Gly Lys Leu Arg Arg Ser Ser Gly Phe Tyr Ile Gly Val Gly Cys
      20             25             30
Ala Met Leu Leu Met Val Gly Leu Val Gly Leu Thr Gly Glu Ala Ile
      35             40             45
Ile Ser Gln Ala Ala Leu Pro Tyr Ile Ser Leu Ile Gly Gly Val Tyr
      50             55             60
Thr Leu Tyr Leu Ala Tyr Gln Val Phe Thr Ala Arg Thr Glu Val Asp
      65             70             75             80
Asp Ala Pro Ser Ala Pro Ala Lys Thr Leu Thr Phe Trp Asn Gly Leu
      85             90             95
Val Ile Gln Leu Leu

```

100

<210> 1201
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 1201
 gtgcgacgcac aactccagct ggctcgctccc aacagcccga acatccccct ttatcgcgat
 60
 atgatacctca ccgtgctgcg catggccaag gatgaccgca accggttgaa tgcaaaaatc
 120
 acgctgcagg cgatccgcga gctggataac gccttccgcg tgctggaaca gttcaagggc
 180
 cgccgcaagg tcacggtgtt tggctcggcg cgcacgccgg tcgaaagccc gctgtacgcc
 240
 ttggcaaggg aagtcggcac gctgctggcg caatccgacc tgatggtgat caccggcggt
 300
 ggcgggcgga tcatggccgc tgcccacgag ggcgcaaggt ctggaacaca gctggggggt
 360

<210> 1202
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 1202
 Val Asp Ala Gln Leu Gln Leu Val Ala Pro Asn Ser Pro Asn Ile Pro
 1 5 10 15
 Leu Tyr Arg Asp Met Ile Leu Thr Val Leu Arg Met Ala Lys Asp Asp
 20 25 30
 Arg Asn Arg Trp Asn Ala Lys Ile Thr Leu Gln Ala Ile Arg Glu Leu
 35 40 45
 Asp Asn Ala Phe Arg Val Leu Glu Gln Phe Lys Gly Arg Arg Lys Val
 50 55 60
 Thr Val Phe Gly Ser Ala Arg Thr Pro Val Glu Ser Pro Leu Tyr Ala
 65 70 75 80
 Leu Ala Arg Glu Val Gly Thr Leu Leu Ala Gln Ser Asp Leu Met Val
 85 90 95
 Ile Thr Gly Gly Gly Gly Gly Ile Met Ala Ala Ala His Glu Gly Ala
 100 105 110
 Arg Ser Gly Thr Gln Pro Gly Gly
 115 120

<210> 1203
 <211> 477
 <212> DNA
 <213> Homo sapiens

<400> 1203
 ccggatatgg cagctcgact tcattcgacc agagttcttg gaacatttgg ctatcatgca
 60
 cctgagtatg caatgactgg acaacttagc tctaagagtg acgtttacag ttttggagtt
 120

1075

ggtcttctgg agctcctgac tggaagaaag cctgtggatc ttccattacc aagaggacag
 180
 caaagtcttg tgacatgggc aactccacgg ctttgtgaag ataaagttag gcaatgcggt
 240
 gattcaagac ttggagtaga atatcctcct aaatccgttg caaagtttgc agctgttgct
 300
 gcactgtgtg tgcaatatga agctgacttt cgacccaaca tgagcatcgt ggtgaaggcg
 360
 cttcagcccc tgctgaatgc acgtgcatcc aacaacctg gatgaatgaa tgaatgactg
 420
 ccgttgcttt tccctgacga gagtatctga atcagacaat catgtagcat tgaattc
 477

<210> 1204
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 1204
 Pro Asp Met Ala Ala Arg Leu His Ser Thr Arg Val Leu Gly Thr Phe
 1 5 10 15
 Gly Tyr His Ala Pro Glu Tyr Ala Met Thr Gly Gln Leu Ser Ser Lys
 20 25 30
 Ser Asp Val Tyr Ser Phe Gly Val Gly Leu Leu Glu Leu Leu Thr Gly
 35 40 45
 Arg Lys Pro Val Asp Leu Pro Leu Pro Arg Gly Gln Gln Ser Leu Val
 50 55 60
 Thr Trp Ala Thr Pro Arg Leu Cys Glu Asp Lys Val Arg Gln Cys Val
 65 70 75 80
 Asp Ser Arg Leu Gly Val Glu Tyr Pro Pro Lys Ser Val Ala Lys Phe
 85 90 95
 Ala Ala Val Ala Ala Leu Cys Val Gln Tyr Glu Ala Asp Phe Arg Pro
 100 105 110
 Asn Met Ser Ile Val Val Lys Ala Leu Gln Pro Leu Leu Asn Ala Arg
 115 120 125
 Ala Ser Asn Asn Pro Gly
 130

<210> 1205
 <211> 407
 <212> DNA
 <213> Homo sapiens

<400> 1205
 acgcgttgcc attgaagact ggcaattaca cgatttacac atcattgatg ctgcagttga
 60
 tgtgcacagg gaaacactag ctaccgtgca gcaggaaatg atgggagaaa tcagccatgg
 120
 taacaagaac caagccatcc tggacacaga cggccgggggt tgtgcgaacg gaacgttagt
 180
 ctatcaatgt gttgcggaac gattcaaggg atgctggccc ccccatcac ttgcccattc
 240
 aagatgtgga gggaatctgt ctgcgcagaa cctggatctc gtgggtgtac gacgttgccc
 300

ccttctcgct cggacgccgc tcattgctccg ccacgtcgct gagcgagtga caaggatatcc
 360
 tgggaccatg cgtatggttt caactgaagc gctggcgaat cgtaaan
 407

<210> 1206
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1206
 Met Met Gly Glu Ile Ser His Gly Asn Lys Asn Gln Ala Ile Leu Asp
 1 5 10 15
 Thr Asp Gly Arg Gly Cys Ala Asn Gly Thr Leu Val Tyr Gln Cys Val
 20 25 30
 Ala Glu Arg Phe Lys Gly Cys Trp Pro Pro Pro Ser Leu Ala Gln Ser
 35 40 45
 Arg Cys Gly Gly Asn Leu Ser Ala Gln Asn Leu Asp Leu Val Val Val
 50 55 60
 Arg Arg Cys Pro Leu Leu Ala Arg Thr Pro Leu Met Leu Arg His Val
 65 70 75 80
 Ala Glu Arg Val Thr Arg Tyr Pro Gly Thr Met Arg Met Val Ser Thr
 85 90 95
 Glu Ala Leu Ala Asn Arg Lys
 100

<210> 1207
 <211> 292
 <212> DNA
 <213> Homo sapiens

<400> 1207
 gctagcatgt cacttttttc ttcagtagat ggcactggag agacattgca ggatgaagag
 60
 gcttgcttcc attcctatgt gctttcccg ccttgcttct ccagccatgt gtgggacaac
 120
 caggggtgct caccacctag tgagtttcag ggacactcca catgtcccag caagtcttat
 180
 cagcatctta gctggcttct caacaagact cagtggcacc cctgtggatg tctcccatca
 240
 agtttcatta gtgcccagg gggagactcc cagaaagttt cagcagcacc ac
 292

<210> 1208
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1208
 Met Ser Leu Phe Ser Ser Val Asp Gly Thr Gly Glu Thr Leu Gln Asp
 1 5 10 15
 Glu Glu Ala Cys Leu His Ser Tyr Val Leu Ser Arg Pro Cys Phe Ser
 20 25 30
 Ser His Val Trp Asp Asn Gln Gly Cys Ser Pro Pro Ser Glu Phe Gln

```

          35          40          45
Gly His Ser Thr Cys Pro Ser Lys Ser Tyr Gln His Leu Ser Trp Leu
   50          55          60
Leu Asn Lys Thr Gln Trp His Pro Cys Gly Cys Leu Pro Ser Ser Phe
65          70          75          80
Ile Ser Ala Pro Gly Gly Asp Ser Gln Lys Val Ser Ala Ala Pro
          85          90          95

```

<210> 1209
 <211> 431
 <212> DNA
 <213> Homo sapiens

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<400> 1209
ttggttccta taatggcggg agcttacatt tttgctggta tcattatattt gttaatgcat
60
gccagtgaag ttattccggc aatatcaact attgtcgagt atgcctttac gccagcttct
120
gcgcaggggtg gttttgctgg tgcaacggta tggatggcga ttcgttttgg tgttgcccgt
180
gggtatattt caaatgaggc aggtttaggt tcggcgccga tcgctcatgc cagtgcacaa
240
actaatgaac cggttcgcca agggttgggtg gcgatgtag gtactttcct tgatacactt
300
attatttgta caggtttagt gattgttatt tctggtgctt ggacagaagg attgtcgggt
360
gctgcgttaa catctgctgc atttaactcg gcgttacctg gttggggggg atacttagtc
420
gctatcagct g
431

```

<210> 1210
 <211> 143
 <212> PRT
 <213> Homo sapiens

```

<400> 1210
Leu Val Pro Ile Met Ala Val Ala Tyr Ile Phe Ala Gly Ile Ile Ile
 1          5          10          15
Leu Leu Met His Ala Ser Glu Val Ile Pro Ala Ile Ser Thr Ile Val
          20          25          30
Glu Tyr Ala Phe Thr Pro Ala Ser Ala Gln Gly Gly Phe Ala Gly Ala
          35          40          45
Thr Val Trp Met Ala Ile Arg Phe Gly Val Ala Arg Gly Val Phe Ser
          50          55          60
Asn Glu Ala Gly Leu Gly Ser Ala Pro Ile Ala His Ala Ser Ala Gln
65          70          75          80
Thr Asn Glu Pro Val Arg Gln Gly Leu Val Ala Met Leu Gly Thr Phe
          85          90          95
Leu Asp Thr Leu Ile Ile Cys Thr Gly Leu Val Ile Val Ile Ser Gly
          100          105          110
Ala Trp Thr Glu Gly Leu Ser Gly Ala Ala Leu Thr Ser Ala Ala Phe
          115          120          125
Asn Leu Ala Leu Pro Gly Trp Gly Gly Tyr Leu Val Ala Ile Ser

```

130 135 140

<210> 1211
<211> 480
<212> DNA
<213> Homo sapiens

<400> 1211
gaggaggac gagaggctgg tgagatggag tccagcaccg tgcaggagag ccccagggcc
60
agagccgaag ctgtgcttct ccatgagatg gatgaagatg atctggccaa tgccttgatc
120
tggcctgaga ttcaacagga gctgaaaatc attgaatctg aggaggagct ctcctcgctg
180
ccacctcctg ctctgaagac cagcccaatt cagcctatcc tcgagtcgag tctggggccc
240
tttatccctc cagagcctcc tgggagcttg ccttggtggc ccttcctcgc tccagtctcc
300
accctctcgg aggtgtggac tagggatcca gccaatcaga gcacacaggg ggcttccaca
360
gcagccagca gagagaagcc ggaacctgag cagggcctgc acccagacct cgccagcctg
420
gctcctctgg aaatagttcc ttttgagaag gcctctccag aggctggagt gtgctcgca
480

<210> 1212
<211> 160
<212> PRT
<213> Homo sapiens

<400> 1212
Glu Glu Gly Arg Glu Ala Gly Glu Met Glu Ser Ser Thr Leu Gln Glu
1 5 10 15
Ser Pro Arg Ala Arg Ala Glu Ala Val Leu Leu His Glu Met Asp Glu
20 25 30
Asp Asp Leu Ala Asn Ala Leu Ile Trp Pro Glu Ile Gln Gln Glu Leu
35 40 45
Lys Ile Ile Glu Ser Glu Glu Glu Leu Ser Ser Leu Pro Pro Pro Ala
50 55 60
Leu Lys Thr Ser Pro Ile Gln Pro Ile Leu Glu Ser Ser Leu Gly Pro
65 70 75 80
Phe Ile Pro Ser Glu Pro Pro Gly Ser Leu Pro Cys Gly Ser Phe Pro
85 90 95
Ala Pro Val Ser Thr Pro Leu Glu Val Trp Thr Arg Asp Pro Ala Asn
100 105 110
Gln Ser Thr Gln Gly Ala Ser Thr Ala Ala Ser Arg Glu Lys Pro Glu
115 120 125
Pro Glu Gln Gly Leu His Pro Asp Leu Ala Ser Leu Ala Pro Leu Glu
130 135 140
Ile Val Pro Phe Glu Lys Ala Ser Pro Glu Ala Gly Val Cys Ser Arg
145 150 155 160

<210> 1213
<211> 1141

<212> DNA

<213> Homo sapiens

<400> 1213

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nntcatgatg gcggcctggg gtgtgggtat gtccacgatg ggcgcgtcac gcgtgtcgcc
60
cgtgatgctc agggggcggg taccgggata gagggggccat cagggcggtg gagttacggc
120
tacaacgagg ctgggtcact catcagcgcg acggggccccc gcacacaaca taactggact
180
cacgacgcct atggccgggt caccagccac gccacatccg gaaccgacac caccttcgcc
240
tgggaccagg aaggccacct ggcgcgagcg tgtacgcgtg cacacgggca tgccactgcc
300
accagtatc gctatgacgc agcgggacgg cgcgtcagtg cgaccagctc agacggccag
360
gaggagcggt actcctggga tggacggggg tggctgtctg acatcaccac cgacgccacg
420
accgtatcga ctcacgtcga tgcattgggg cgcgccagtc gtatcaccac taaggggccag
480
caggtacgag tggactggga cctcgtgacc ggagccccc cctcgattga tggtcgtcct
540
gtgcttcccc tgcccggagg acgcatcctc ggcgccacac ccatcggcga taccaaccta
600
tggcgtgagg tcatgcccac cgaccctgac aacccttacc agcccggcac ggccactatt
660
gagggtgtcc ccgagacgat caggatggcc gggaacacgc tagtggttga tggtcaccct
720
tgggtggggg gcgcctctac gacccaacta ccaccacctt cttgtctcct gacccgtaa
780
ccccgcccgc cggcgcgcta tgggccaaca acccctacga ctacgccaac aacaaccccc
840
tcaccctcac cgatcctctc gggacccacc ccgtcaccga cgaccaactg gcactcctca
900
cccaccccat cggcacactc gcacactacg tcgccaactc cgtcagcaca ctcgtgcac
960
acatcaccga tccgatcagc cactgggtggg ccaccacaaa agaccggatc ctctcccg
1020
acttcctgat cgggtgccgg ctcgtcatcg gcggtatcgc gtagcggcca cgggcgtagg
1080
aggacccctc ctagccgagg ccatttcagg gggactcatc tcaggcgggt tttccgctag
1140
c
1141

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<210> 1214

<211> 259

<212> PRT

<213> Homo sapiens

<400> 1214

```

Xaa His Asp Gly Gly Leu Val Cys Gly Tyr Val His Asp Gly Arg Val
  1           5           10           15
Thr Arg Val Ala Arg Asp Ala Gln Gly Arg Val Thr Gly Ile Glu Gly

```

```

                20                25                30
Pro Ser Gly Arg Trp Ser Tyr Gly Tyr Asn Glu Ala Gly Ser Leu Ile
                35                40                45
Ser Ala Thr Gly Pro Arg Thr Gln His Asn Trp Thr His Asp Ala Tyr
                50                55                60
Gly Arg Leu Thr Ser His Ala Thr Ser Gly Thr Asp Thr Thr Phe Ala
65                70                75                80
Trp Asp Gln Glu Gly His Leu Ala Gln Thr Cys Thr Arg Ala His Gly
                85                90                95
His Ala Thr Ala Thr Gln Tyr Arg Tyr Asp Ala Ala Gly Arg Arg Val
                100                105                110
Ser Ala Thr Ser Ser Asp Gly Gln Glu Glu Arg Tyr Ser Trp Asp Gly
                115                120                125
Arg Gly Trp Leu Ser Asp Ile Thr Thr Asp Ala Thr Thr Val Ser Thr
                130                135                140
His Val Asp Ala Leu Gly Arg Ala Ser Arg Ile Thr Thr Lys Gly Gln
145                150                155                160
Gln Val Arg Val Asp Trp Asp Leu Val Thr Gly Ala Pro Thr Ser Ile
                165                170                175
Asp Gly Arg Pro Val Leu Pro Leu Pro Gly Gly Arg Ile Leu Gly Ala
                180                185                190
Thr Pro Ile Gly Asp Thr Asn Leu Trp Arg Glu Val Met Pro Thr Asp
                195                200                205
Pro Asp Asn Pro Tyr Gln Pro Ala Thr Ala Thr Ile Glu Gly Val Pro
                210                215                220
Glu Thr Ile Arg Met Ala Gly Asn Thr Leu Val Val Asp Gly His Pro
225                230                235                240
Trp Trp Gly Arg Ala Ser Thr Thr Gln Leu Pro Pro Pro Ser Cys Leu
                245                250                255
Leu Thr Arg

```

<210> 1215

<211> 317

<212> DNA

<213> Homo sapiens

<400> 1215

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acgcgttcgc tgcagatcga gtcgccggtg agctcgatct acctgtggat gtactacgtg
60

```

```

ggcgtgccga catccggcat cgggggggat cccaacctgc ttacctttta ttggaaccgc
120

```

```

ccccggggtc aaccgggcca tcaccgggag aacgccgctc ctcggagggg gtgttctcgc
180

```

```

agtcgccggc gtgggtgctg ggaagaagta ccgcggcacg accttcggcg ggctgctccc
240

```

```

gtcgtgtgcc ctcggcctcg tgctcgctt catcgtgctg aacaaggctg gtcgccgca
300

```

```

gtacatcgcc tggatcn

```

317

<210> 1216

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1216

```

Met Tyr Cys Gly Glu Pro Thr Leu Phe Ser Thr Met Asn Ala Ser Thr
 1           5           10           15
Arg Pro Arg Asp Ser Asp Gly Ser Ser Pro Pro Lys Val Val Pro Arg
      20           25           30
Tyr Phe Phe His Ala Pro Thr Pro Ala Thr Ala Arg Thr Pro Pro Pro
      35           40           45
Arg Ser Gly Val Leu Pro Val Met Ala Gly Leu Thr Pro Gly Ala Val
      50           55           60
Pro Ile Lys Gly Lys Gln Val Gly Ile Pro Pro Asp Ala Gly Cys Arg
65           70           75           80
His Ala His Val Val His Pro Gln Val Asp Arg Ala His Arg Arg Leu
      85           90           95
Asp Leu Gln Arg Thr Arg
      100

```

<210> 1217

<211> 548

<212> DNA

<213> Homo sapiens

<400> 1217

```

nacgcgtggg ttgacgcgct attaaacgat aagagcaaaa aaacatttcc tcatttatta
60
cgttgtcggg tgaatgatgt ttctggtgat agtcagtgga tagagatgcg aggcagtgtg
120
acaggttggg acagccgtca tcgagctcag atgggtgagag ggacattcga gcgtattaac
180
catcttattg acgctgaaaa tgaattaatt gcggcccgtg aagatgctca gcgacgagag
240
cttattttat cggctttgct aaataatatt ccagaccctg tttggtctaa agatgaaagc
300
ggtcggttatt tggactgtaa ccatgcgttt tgtctgttta atgggtttaga gcagagtgtg
360
gttcaggggc aaaaagacag tgaattaaac ttagataata atgggtcaata ttatcaagat
420
atgggcggtg aggtattagc gcgaggggag atttttcatg aacattgttg gggtagcct
480
gcagatggaa gtgacaaccg cttgtttgaa gtatatcgag tccctatcaa agagcctacc
540
gtgaattc
548

```

<210> 1218

<211> 182

<212> PRT

<213> Homo sapiens

<400> 1218

```

Xaa Ala Trp Val Asp Ala Leu Leu Asn Asp Lys Ser Lys Lys Thr Phe
 1           5           10           15
Pro His Leu Leu Arg Cys Arg Val Asn Asp Val Ser Gly Asp Ser Gln

```

```

                20                25                30
Trp Ile Glu Met Arg Gly Ser Val Thr Gly Trp Asp Ser Arg His Arg
      35                40                45
Ala Gln Met Val Arg Gly Thr Phe Glu Arg Ile Asn His Leu Ile Asp
      50                55                60
Ala Glu Asn Glu Leu Ile Ala Ala Arg Glu Asp Ala Gln Arg Arg Glu
65      70                75                80
Leu Ile Leu Ser Ala Leu Leu Asn Asn Ile Pro Asp Pro Val Trp Ser
      85                90                95
Lys Asp Glu Ser Gly Arg Tyr Leu Asp Cys Asn His Ala Phe Cys Leu
      100                105                110
Phe Asn Gly Leu Glu Gln Ser Asp Val Gln Gly Gln Lys Asp Ser Glu
      115                120                125
Leu Asn Leu Asp Asn Asn Gly Gln Tyr Tyr Gln Asp Met Gly Gly Glu
      130                135                140
Val Leu Ala Arg Gly Glu Ile Phe His Glu His Cys Trp Gly Thr Pro
145      150                155                160
Ala Asp Gly Ser Asp Asn Arg Leu Phe Glu Val Tyr Arg Val Pro Ile
      165                170                175
Lys Glu Pro Thr Val Asn
      180

```

<210> 1219
 <211> 308
 <212> DNA
 <213> Homo sapiens

```

<400> 1219
acgcgtgaag ggaggaatac agatggagaa atgggtccac caaaaaatga tgagggtacc
60
tccagagaaa attaccaaga ccattctgtt agtattttcc agctccacag gcctttggaa
120
gttcccagac caccctccct cttttcaaac taaaacaggg atggctctta accaccaccc
180
aaaggcaagg ggggtcttaa aacccaaacc aagtggggca ggggccagcc tcttcaggag
240
ggcccaaccc tgcagcctct gccatttgg gaaagaccgt gagttggaat tatggggtcg
300
tgggggggc
308

```

<210> 1220
 <211> 95
 <212> PRT
 <213> Homo sapiens

```

<400> 1220
Met Glu Lys Trp Val His Gln Lys Met Met Arg Val Pro Pro Glu Lys
  1                5                10                15
Ile Thr Lys Thr Ile Leu Leu Val Phe Ser Ser Ser Thr Gly Leu Trp
      20                25                30
Lys Phe Pro Asp His Pro Pro Ser Phe Gln Thr Lys Thr Gly Met Ala
      35                40                45
Leu Asn His His Pro Lys Ala Arg Gly Val Leu Lys Pro Lys Pro Ser

```

50 55 60
 Gly Ala Gly Ala Ser Leu Phe Arg Arg Ala Gln Pro Cys Ser Leu Cys
 65 70 75 80
 Pro Phe Gly Lys Asp Arg Glu Leu Glu Leu Trp Val Gly Gly Gly
 85 90 95

<210> 1221
 <211> 569
 <212> DNA
 <213> Homo sapiens

<400> 1221
 gcgcgccagg ggcaggtagc ctgtggcagg tgaggctgcg tgtggggtgt gctcccagag
 60
 gcccgctccag gaaagctgca cctcagagaa gcagtttctt tccttacctg ggaagtttct
 120
 tctgtaacac gttaagcccc acaggtaagg cctgatcccc cctggacggc tccccctctc
 180
 agtggtccca gtctggaggt antcttttct aagccatcct ctcagaatgt gatgggtacc
 240
 aggatgcaca cccggtggcc ctgtggtgtg aggcctcagc aaacacggtc agaagatgaa
 300
 cacacagaga cccgcccgtc ggaaggagag gagggagcgg atacggaggc ccacgtgcca
 360
 gaagggtccc ttgcagtggg gtggttatgt gcctgcaatc ccagagtgtc ctgaaggac
 420
 ctcagatcta acgagctcag ccggcagctg cacgtgggac cagccctctg agcttcactt
 480
 gttttcctct gtgccatcag aaaccaatac gaagataaaa tgggaaaaaa aaaaatccca
 540
 ttcacggcac agcctgccga gaaacgcgt
 569

<210> 1222
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1222
 Met Asn Thr Gln Arg Pro Ala Arg Arg Lys Glu Arg Arg Glu Arg Ile
 1 5 10 15
 Arg Arg Pro Thr Cys Gln Lys Gly Pro Leu Gln Trp Cys Gly Tyr Val
 20 25 30
 Pro Ala Ile Pro Glu Cys Pro Arg Arg Thr Ser Asp Leu Thr Ser Ser
 35 40 45
 Ala Gly Ser Cys Thr Trp Asp Gln Pro Ser Glu Leu His Leu Phe Ser
 50 55 60
 Ser Val Pro Ser Glu Thr Asn Thr Lys Ile Lys Trp Glu Lys Lys Lys
 65 70 75 80
 Ser His Ser Arg His Ser Leu Pro Arg Asn Ala
 85 90

<210> 1223
 <211> 450

<212> DNA

<213> Homo sapiens

<400> 1223

aagcttgctc aggctagtgc cgacgctgct gctctcaaac tcgtcgatgc ccaccgggtg
 60
 ttgtgcgctc accgagaggg gccatacggg gtagacgagt ggtctcagcg catggttact
 120
 gtactttcag atgtgttgcc tgggtgttggc caaggcgggt gggttctcgg cgaaactgca
 180
 atagtaacgc ataacctcgc acaattggga gtcaataacg gtgattgagg ggtcatcggt
 240
 gaaacaaggc ccgccccac gatagctcta cggggaccgc gtggagtccc cagacgggtg
 300
 ccctgttccc tcatcccatc gctgcaacct ttacaggcga tgacgattca caaagcgagc
 360
 ggcagccaat tcacggacgt aacgggtggc ctgccaccac ccgactcgcc cctcctctct
 420
 cgtgagttgc tctatacgc catcacgcgt
 450

<210> 1224

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1224

Lys	Leu	Ala	Gln	Ala	Ser	Ala	Asp	Ala	Ala	Ala	Leu	Lys	Leu	Val	Asp
1			5					10						15	
Ala	His	Arg	Leu	Leu	Cys	Ala	His	Arg	Glu	Gly	Pro	Tyr	Gly	Val	Asp
		20						25					30		
Glu	Trp	Ser	Gln	Arg	Met	Val	Thr	Val	Leu	Ser	Asp	Val	Leu	Pro	Gly
	35					40						45			
Val	Gly	Gln	Gly	Arg	Trp	Val	Leu	Gly	Glu	Thr	Ala	Ile	Val	Thr	His
50						55					60				
Asn	Leu	Ala	Gln	Leu	Gly	Val	Asn	Asn	Gly	Asp	Cys	Gly	Val	Ile	Val
65				70					75					80	
Glu	Thr	Arg	Pro	Val	Pro	Thr	Ile	Ala	Leu	Pro	Gly	Pro	Gly	Gly	Val
			85					90					95		
Pro	Arg	Arg	Leu	Pro	Cys	Ser	Leu	Ile	Pro	Ser	Leu	Gln	Pro	Leu	Gln
			100					105					110		
Ala	Met	Thr	Ile	His	Lys	Ala	Gln	Gly	Ser	Gln	Phe	Thr	Asp	Val	Thr
		115					120					125			
Val	Val	Leu	Pro	Pro	Pro	Asp	Ser	Pro	Leu	Leu	Ser	Arg	Glu	Leu	Leu
	130					135						140			
Tyr	Thr	Ala	Ile	Thr	Arg										
145					150										

<210> 1225

<211> 436

<212> DNA

<213> Homo sapiens

<400> 1225

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 120
 caaagcccc cgaagtaag aagtagaaaa aaacccgacc ccgaccagat gaagggaccc
 180
 gggaagtgtt tggaagag actgctgaag tgtctccttg caggcatcac cgtgagctgg
 240
 ggctttgcac acagcatctt catggctttc cacaatgatc ccagaactga tccagagaaa
 300
 cccagggatc aggggttgac ccgaccctgt catcatccca ttctacaaat gaggacactg
 360
 aggcctggtg aaaagggagg ggtggatgga accaggtggc ctggctctaa gaccagagg
 420
 ctggagtgtg ctcattg
 436

<210> 1226
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1226
 Met Val Asn Thr Gly Met Ala Thr Trp Glu Leu Lys Val Leu Ser Val
 1 5 10 15
 Gly Gly Gln Gly Pro Gln Phe Leu Ala His Trp Pro Arg Glu Val Met
 20 25 30
 Lys Thr Gln Ser Pro Pro Lys Val Arg Ser Arg Lys Lys Pro Asp Pro
 35 40 45
 Asp Gln Met Lys Gly Pro Gly Lys Phe Leu Glu Lys Arg Leu Leu Lys
 50 55 60
 Cys Leu Leu Ala Gly Ile Thr Val Ser Trp Gly Phe Ala His Ser Ile
 65 70 75 80
 Phe Met Ala Phe His Asn Asp Pro Arg Thr Asp Pro Glu Lys Pro Arg
 85 90 95
 Asp Gln Gly Leu Thr Arg Pro Cys His His Pro Ile Leu Gln Met Arg
 100 105 110
 Thr Leu Arg Pro Gly Glu Lys Gly Gly Val Asp Gly Thr Arg Trp Pro
 115 120 125
 Gly Ser Lys Thr Gln Arg Leu Glu Cys Ala His
 130 135

<210> 1227
 <211> 756
 <212> DNA
 <213> Homo sapiens

<400> 1227
 gttgagttcc acgtgaaaca aaatgcactt tacaatagaa tgacgattcg tatcaaagat
 60
 aatgggtattg gaataccgat taacaaggta gataaaatct ttgatagatt ctaccgtgtc
 120
 gacaaagcac gtacacgtaa gatgggaggc acaggactag gtctagctat ttccaaagag
 180

attgtcgaag cacataatgg ccgtatttgg gcaaatagtg tcgaaggaca aggtacatct
 240
 atcttcatta ccctaccatg tgaaattatt gaagatgggtg attgggatga atagtaaaga
 300
 atacatcaaa acgattatcc tgatactact tgtattaatg agtatcgtct taacctacat
 360
 ggtatggaac ttctcacctg atctatcaaa tgctgatagt acgtcatcag ataataagaa
 420
 agataattct aaacctattg gaaaaccaat gagtgcgaaa acggataaaa ccatcacacc
 480
 atttcaaadc gttcaatcta atggcgaaaa aacaaaaggt atgccagcaa cagggtcatgc
 540
 agtatctcaa attttaagcc cattaaaaga taaaaatggt gattcagtac aacatttaaa
 600
 acgaaatcat aacttaatta ttctgaatt aagtgataac tttatcgttc ttgatttcac
 660
 atatgattta ccgttatcaa ttactttaag ccaagtatta aacatagatg ctaagacacc
 720
 taatcatctt aactttaatc gactactgat tgatca
 756

<210> 1228

<211> 97

<212> PRT

<213> Homo sapiens

<400> 1228

Val	Glu	Phe	His	Val	Lys	Gln	Asn	Ala	Leu	Tyr	Asn	Arg	Met	Thr	Ile
1				5					10				15		
Arg	Ile	Lys	Asp	Asn	Gly	Ile	Gly	Ile	Pro	Ile	Asn	Lys	Val	Asp	Lys
			20				25					30			
Ile	Phe	Asp	Arg	Phe	Tyr	Arg	Val	Asp	Lys	Ala	Arg	Thr	Arg	Lys	Met
		35				40					45				
Gly	Gly	Thr	Gly	Leu	Gly	Leu	Ala	Ile	Ser	Lys	Glu	Ile	Val	Glu	Ala
		50				55					60				
His	Asn	Gly	Arg	Ile	Trp	Ala	Asn	Ser	Val	Glu	Gly	Gln	Gly	Thr	Ser
65				70					75				80		
Ile	Phe	Ile	Thr	Leu	Pro	Cys	Glu	Ile	Ile	Glu	Asp	Gly	Asp	Trp	Asp
			85					90					95		

Glu

<210> 1229

<211> 377

<212> DNA

<213> Homo sapiens

<400> 1229

nacgcgtcgt gaacgcggcg tcaacagctt ttccgatata cctctgagga gcccaagatg
 60
 cttgtcgccc ccatggcaaa ccaggggggtc gaggccactg gagcgatggg aaccgacacc
 120
 ccgctggccg tgctatctaa ctgtccgcgg atgctctggg actatttcag tcagcttttc
 180

gctcaggtaa ccaatccgcc cttggacgct atccgcgagg agcttgtcac ctccctgacg
 240
 ggcaccatcg gcccgaggc gaacttgctt gagcctggcc cggaatcatg tccgcaagtg
 300
 gtcgtcaact acccgatcat cgattccgac cagcttgcca agatcattca catcgacgct
 360
 gacgggggagc atccgga
 377

<210> 1230
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1230
 Thr Arg Arg Gln Gln Leu Phe Gly Tyr Thr Ser Glu Glu Pro Lys Met
 1 5 10 15
 Leu Val Ala Pro Met Ala Asn Gln Gly Val Glu Ala Thr Gly Ala Met
 20 25 30
 Gly Thr Asp Thr Pro Leu Ala Val Leu Ser Asn Cys Pro Arg Met Leu
 35 40 45
 Trp Asp Tyr Phe Ser Gln Leu Phe Ala Gln Val Thr Asn Pro Pro Leu
 50 55 60
 Asp Ala Ile Arg Glu Glu Leu Val Thr Ser Leu Thr Gly Thr Ile Gly
 65 70 75 80
 Pro Glu Ala Asn Leu Leu Glu Pro Gly Pro Glu Ser Cys Arg Gln Val
 85 90 95
 Val Val Asn Tyr Pro Ile Ile Asp Ser Asp Gln Leu Ala Lys Ile Ile
 100 105 110
 His Ile Asp Ala Asp Gly Glu His Pro
 115 120

<210> 1231
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 1231
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 60
 cggaagtaag gagtttttat ggcggtttta atcaccggag acgccgggta taccggttct
 120
 cacactgttc tggctttggt agaacatggc gaagatgttg tagtggttaga taatttatca
 180
 aactcttccg atgagtctct gcgtcgcggt gagaaactcg cgggtagaag tgctcagttc
 240
 taccaggcg atatcttgga tgctgagtgt ctgcacgca tcttcgaggg tcacgacatc
 300
 tcggctgtga tccattttgc tgggctaaag ggtgtcggag agtcgacgcg t
 351

<210> 1232
 <211> 91
 <212> PRT

<213> Homo sapiens

<400> 1232

```

Met Ala Val Leu Ile Thr Gly Asp Ala Gly Tyr Ile Gly Ser His Thr
  1           5           10           15
Val Leu Ala Leu Leu Glu His Gly Glu Asp Val Val Val Leu Asp Asn
          20           25           30
Leu Ser Asn Ser Ser Asp Glu Ser Leu Arg Arg Val Glu Lys Leu Ala
          35           40           45
Gly Arg Ser Ala Gln Phe Tyr Gln Gly Asp Ile Leu Asp Ala Glu Cys
          50           55           60
Leu His Arg Ile Phe Glu Ala His Asp Ile Ser Ala Val Ile His Phe
        65           70           75           80
Ala Gly Leu Lys Gly Val Gly Glu Ser Thr Arg
          85           90

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<210> 1233

<211> 4982

<212> DNA

<213> Homo sapiens

<400> 1233

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nnggcttaag cagtggtaac aacgcagagt acgcgggggtg atggcctccc tgaaattaaa
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catttctatt agtggcttcc cgtaaacttc atccttctta gatcaaacct cgttatatct
120
cctgectatc tcttttgcac tccaaagtcc agttttatta aatcccaggg tctaagattt
180
tttctttgag aatttatctc cagtgtttct atggaaatta aaaaagaaaa ttaggataat
240
tcaatgtcga aatgttgcat gcatcttttg agaaatttat atttttagg ttgaaggact
300
tgcttttttg gcagcgtatt tttggagggtg gaatgtagtt attttaataa ccatgtccta
360
attatttata gcttcctgcc tgacacagct cacttcaaga agtgcacaat gtcagaacgt
420
ggaattaagt gggcttgtga atattgtacg tatgaaaact ggccatctgc aatcaagtgt
480
accatgtgtc gtgcccgaag acctagtggg acaattatta cagaagatcc atttaaaagt
540
ggttcaagtg atgttggtag agattgggat ccttcagca ccgaaggagg aagtagtcct
600
ttgatatgtc cagactctag tgcaagacca agggtgaaat cttcgtatag catggaaaat
660
gcaaataagt ggtcatgcc catgtgtaca tatttgaact ggccaagagc aatcagatgt
720
accagtgtc tatcccaacg taggaccagg agtcctacag aatctcctca gtcctcagga
780
tctggctcaa gaccagtgtc tttttctgtt gatccttgtg aggaatacaa tgatagaaat
840
aaactgaaca ctaggacaca gcaactggact tgctctgttt gcacatatga aaactgggccc
900
aaggctaaaa gatgtgttgt ttgtgatcat cccagacctt ataacattga agcaatagaa
960

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ttggcagaga ctgaagaggc ttcttcaata ataaatgagc aagacagagc tcgatggagg
1020
ggaagttgca gtagtggttaa tagccaaagg agatcacctc ctgctacgaa gctggactct
1080
gaagtgaata tggattttca gaggattgaa ttggctgggtg ctgtgggaag caaggaggaa
1140
cttgaagtag actttaaaaa actaaagcaa attaaaaaca ggatgaaaaa gactgattgg
1200
ctcttctca atgcttgtgt ggggggttga gaagggtgatt tagctgccat agaagcatac
1260
aagtcacag gaggagacat tgcacgtcag ctcaccgag atgaagtacg cttgctgaat
1320
cgctcttctg cctttgatgt tggctatact cttgtacact tggctatacg ttttcagagg
1380
caggatatgc tagcaatatt gcttacagag gtgtctcaac aagcagcaaa gtgtattcca
1440
gcaatgggtg gtcctgaact gacagaacaa atccggagag agatagctgc ctctcttcat
1500
cagagaaagg gggattttgc ttgctatttt ctgactgacc ttgtaacatt tacattgcc
1560
gcagatattg aagatttgcc cccaacagtc caagaaaaat tatttgatga ggtgcttgat
1620
agagacgttc aaaaagaatt agaagaagaa tctccaatta ttaactggtc cttggaattg
1680
gctacacgtt tggacagtcg actgtatgca ctttggaaac ggactgcagg agactgccta
1740
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1800
gccctgcag acagcctgca tgactgttca cattgggttt acacacgctg gaaagattgg
1860
gaatcatggt attctcagag ctttggttta ctttttctt tgagagaaga acagtggcaa
1920
gaagactggg catttatact ctctcttgc agtcagcctg gagcaagctt ggagcagacg
1980
cacatttttg tactggcaca tattcttaga cgaccaatta tagtttatgg agtaaaatat
2040
tacaagagtt tccggggaga aacttttaga tatactcggg ttcaagggtg ttatctgcct
2100
ttgttggtgg aacagagttt ttgttggaag agtccgattg ctctgggtta tacgaggggc
2160
cacttctctg ctttgggtgc catggaaaat gatggctatg gcaaccgagg tgctgggtgct
2220
aatctcaata ccgatgatga tgtcaccatc acatttttgc ctctgggtga cagtgaagg
2280
aagctactcc atgtgcactt cctttctgct caggagctag gtaatgagga acagcaagaa
2340
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2400
cagaagagtt ctggcgggcg aaatcaccct ctggctcact agatggtaga aaaatggctt
2460
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2520
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2580

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2640
gcaggatctg ctcggggaag tgttttctctg gaccacacac accttatgga gataatgcct
2700
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2760
tattaagaca gaactttttt tccttccaaa ttgtaaatct gtctataaat gtaacgcatg
2820
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2880
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2940
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3000
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3060
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3120
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3240
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3540
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3720
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3780
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3840
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3900
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3960
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4020
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4080
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4140
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4200

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 4260
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 4500
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 4620
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 4680
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 4740
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 4800
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 4860
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 4980
 aa
 4982

<210> 1234
 <211> 708
 <212> PRT
 <213> Homo sapiens

<400> 1234
 Met Ser Glu Arg Gly Ile Lys Trp Ala Cys Glu Tyr Cys Thr Tyr Glu
 1 5 10 15
 Asn Trp Pro Ser Ala Ile Lys Cys Thr Met Cys Arg Ala Gln Arg Pro
 20 25 30
 Ser Gly Thr Ile Ile Thr Glu Asp Pro Phe Lys Ser Gly Ser Ser Asp
 35 40 45
 Val Gly Arg Asp Trp Asp Pro Ser Ser Thr Glu Gly Gly Ser Ser Pro
 50 55 60
 Leu Ile Cys Pro Asp Ser Ser Ala Arg Pro Arg Val Lys Ser Ser Tyr
 65 70 75 80
 Ser Met Glu Asn Ala Asn Lys Trp Ser Cys His Met Cys Thr Tyr Leu
 85 90 95
 Asn Trp Pro Arg Ala Ile Arg Cys Thr Gln Cys Leu Ser Gln Arg Arg
 100 105 110
 Thr Arg Ser Pro Thr Glu Ser Pro Gln Ser Ser Gly Ser Gly Ser Arg
 115 120 125
 Pro Val Ala Phe Ser Val Asp Pro Cys Glu Glu Tyr Asn Asp Arg Asn
 130 135 140
 Lys Leu Asn Thr Arg Thr Gln His Trp Thr Cys Ser Val Cys Thr Tyr


```

145              150              155              160
Glu Asn Trp Ala Lys Ala Lys Arg Cys Val Val Cys Asp His Pro Arg
              165              170              175
Pro Asn Asn Ile Glu Ala Ile Glu Leu Ala Glu Thr Glu Glu Ala Ser
              180              185              190
Ser Ile Ile Asn Glu Gln Asp Arg Ala Arg Trp Arg Gly Ser Cys Ser
              195              200              205
Ser Gly Asn Ser Gln Arg Arg Ser Pro Pro Ala Thr Lys Arg Asp Ser
              210              215              220
Glu Val Lys Met Asp Phe Gln Arg Ile Glu Leu Ala Gly Ala Val Gly
225              230              235              240
Ser Lys Glu Glu Leu Glu Val Asp Phe Lys Lys Leu Lys Gln Ile Lys
              245              250              255
Asn Arg Met Lys Lys Thr Asp Trp Leu Phe Leu Asn Ala Cys Val Gly
              260              265              270
Val Val Glu Gly Asp Leu Ala Ala Ile Glu Ala Tyr Lys Ser Ser Gly
              275              280              285
Gly Asp Ile Ala Arg Gln Leu Thr Ala Asp Glu Val Arg Leu Leu Asn
290              295              300
Arg Pro Ser Ala Phe Asp Val Gly Tyr Thr Leu Val His Leu Ala Ile
305              310              315              320
Arg Phe Gln Arg Gln Asp Met Leu Ala Ile Leu Leu Thr Glu Val Ser
              325              330              335
Gln Gln Ala Ala Lys Cys Ile Pro Ala Met Val Cys Pro Glu Leu Thr
              340              345              350
Glu Gln Ile Arg Arg Glu Ile Ala Ala Ser Leu His Gln Arg Lys Gly
              355              360              365
Asp Phe Ala Cys Tyr Phe Leu Thr Asp Leu Val Thr Phe Thr Leu Pro
370              375              380
Ala Asp Ile Glu Asp Leu Pro Pro Thr Val Gln Glu Lys Leu Phe Asp
385              390              395              400
Glu Val Leu Asp Arg Asp Val Gln Lys Glu Leu Glu Glu Glu Ser Pro
              405              410              415
Ile Ile Asn Trp Ser Leu Glu Leu Ala Thr Arg Leu Asp Ser Arg Leu
              420              425              430
Tyr Ala Leu Trp Asn Arg Thr Ala Gly Asp Cys Leu Leu Asp Ser Val
              435              440              445
Leu Gln Ala Thr Trp Gly Ile Tyr Asp Lys Asp Ser Val Leu Arg Lys
450              455              460
Ala Leu His Asp Ser Leu His Asp Cys Ser His Trp Phe Tyr Thr Arg
465              470              475              480
Trp Lys Asp Trp Glu Ser Trp Tyr Ser Gln Ser Phe Gly Leu His Phe
              485              490              495
Ser Leu Arg Glu Glu Gln Trp Gln Glu Asp Trp Ala Phe Ile Leu Ser
500              505              510
Leu Ala Ser Gln Pro Gly Ala Ser Leu Glu Gln Thr His Ile Phe Val
515              520              525
Leu Ala His Ile Leu Arg Arg Pro Ile Ile Val Tyr Gly Val Lys Tyr
530              535              540
Tyr Lys Ser Phe Arg Gly Glu Thr Leu Gly Tyr Thr Arg Phe Gln Gly
545              550              555              560
Val Tyr Leu Pro Leu Leu Trp Glu Gln Ser Phe Cys Trp Lys Ser Pro
              565              570              575
Ile Ala Leu Gly Tyr Thr Arg Gly His Phe Ser Ala Leu Val Ala Met

```

```

      580      585      590
Glu Asn Asp Gly Tyr Gly Asn Arg Gly Ala Gly Ala Asn Leu Asn Thr
      595      600      605
Asp Asp Asp Val Thr Ile Thr Phe Leu Pro Leu Val Asp Ser Glu Arg
      610      615      620
Lys Leu Leu His Val His Phe Leu Ser Ala Gln Glu Leu Gly Asn Glu
      625      630      635      640
Glu Gln Gln Glu Lys Leu Leu Arg Glu Trp Leu Asp Cys Cys Val Thr
      645      650      655
Glu Gly Gly Val Leu Val Ala Met Gln Lys Ser Ser Arg Arg Arg Asn
      660      665      670
His Pro Leu Val Thr Gln Met Val Glu Lys Trp Leu Asp Arg Tyr Arg
      675      680      685
Gln Ile Arg Pro Cys Thr Ser Leu Ser Asp Gly Glu Glu Asp Glu Asp
      690      695      700
Asp Glu Asp Glu
705

```

```

<210> 1235
<211> 383
<212> DNA
<213> Homo sapiens

```

```

<400> 1235
gcgtctcagg ccgtgnetca gatacctgtc gatatgacga ccttggggcgc tgatttggtg
60
gccttcaccg gtcacaagat gtgcgggtccg acgggtatcg gcattctctg gggacgctat
120
gacctcctcg ctgagctacc gcccttcctc ggaggcggcg agatgatcga ggtcgtgcgc
180
atggagggat cgacctacgc cgagcctcca catcgttttg aggcaggcac cccgccgatc
240
gcacagctgg ctgccctcgg ggtggccgcc gactacctag atggcatcgg gatgcaggcc
300
atcgccgagc acgaacatga gctggctgct cggatgctcg aagactacca gaccgtcaag
360
ggagtgcagc cggagagagg ctg
383

```

```

<210> 1236
<211> 127
<212> PRT
<213> Homo sapiens

```

```

<400> 1236
Ala Ser Gln Ala Val Xaa Gln Ile Pro Val Asp Met Thr Thr Leu Gly
1      5      10      15
Ala Asp Leu Val Ala Phe Thr Gly His Lys Met Cys Gly Pro Thr Gly
20     25     30
Ile Gly Ile Leu Trp Gly Arg Tyr Asp Leu Leu Ala Glu Leu Pro Pro
35     40     45
Phe Leu Gly Gly Gly Glu Met Ile Glu Val Val Arg Met Glu Gly Ser
50     55     60
Thr Tyr Ala Glu Pro Pro His Arg Phe Glu Ala Gly Thr Pro Pro Ile

```

65		70		75		80									
Ala	Gln	Leu	Ala	Ala	Leu	Gly	Val	Ala	Ala	Asp	Tyr	Leu	Asp	Gly	Ile
		85		90		95									
Gly	Met	Gln	Ala	Ile	Ala	Glu	His	Glu	His	Glu	Leu	Ala	Ala	Arg	Met
		100		105		110									
Leu	Glu	Asp	Tyr	Gln	Thr	Val	Lys	Gly	Val	Gln	Pro	Glu	Arg	Gly	
		115		120		125									

<210> 1237

<211> 1608

<212> DNA

<213> Homo sapiens

<400> 1237

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ccatggccga agggccatac tctacaggcc tcctttctac agcaaaacag agcttcagct
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acaccagcac attctgactc aacatggcta tacggttgct atcgctgaag aaaggctcaa
120
tgctggccta gggccggggc tactagaaca aggtgatctg ggctcttggg atctgctcat
180
ttgctgtct tctaagaaag cagaaggaac accctgtata tccaaggaag tcatgtgcca
240
gttaggttta catcaaaagg caaacagatt accagaaata cagcagccac tttgcagaaa
300
ggaaggatta tgtcaaatac ttagaagatt ccagaaactg caacttccag tgagtccttc
360
tgtgtgtctg gatcagggaa tgcaattaaa gccgagtact tcgagtcacc ttttaaaac
420
agtgaagcca cgtgtgtgga aaccagggga ctggagtcgt gaacagctga atgaaacgac
480
agtccttgct ccacatgaaa caatctttcg agccaaagat ctatctgtga ttcttaaagc
540
gtatgtgttg gtgacgtcct taaccctttt gcgtgcattc attcattcga ctggcacagt
600
ttggaatcca ccaaagaaaa aacgcttcac tgtcaagctg caaacatttt ttgagacatt
660
cctgagagcc agttcacctc aacaggcttt tgacattatg aaggaagcaa ttggcaaaact
720
actgctagcc gctgaagtat tcagtgaaac atctactctg ggaccaaaga ccttccatag
780
atgcagattc tgctttcaac ttctaacttt tgatattggg tatggcagtt tcatgtaccc
840
tgtagtgttc caggtacacg agcatttaaa ttttcaagat tatgataata tggattttga
900
ggaccaaact acagaagaat tccttttaaa tgacactttc aattttctct tcctaatga
960
atcatcactt tccatatttt ctgagatatt tcagagactt tatagatcag atgttttcaa
1020
gggtgaaaac tatcaaaagg aactaaatca gtgtctgtcc ttagaagaaa ttaactcaat
1080
tatgactttc ataaaggaac ttggaagtct gggacaattc caactgctct tcccatctac
1140
tactcctggg attcagtcac tgatgcatga attttatgat gtggcaaatc ctgtgggaaa
1200

```

tcctggctca gtcctgaccc aatactgggc tcttttaaatt gtatttgaac aatttcagtt
 1260
 catgaataaa aagacacagc cacatccact ggaatggaat tctttcacag aagataagaa
 1320
 cattgaaaaa ccacaagtgc catttgatgc aatagaaaat aaaaaagctg cagttccaca
 1380
 aattaaaaat gaaaataaag aaatacattg cagtgatgat gaaaacacac catgtcatat
 1440
 caagcagatc ttcacacatc cacatttgga actaaatcct gactttcatc caaagatcaa
 1500
 agattattac tgtgaagtcc catttgatgt ggtaacagtg acaattggag tggaaactcc
 1560
 taagtgtctg tgcaaggtgc acctgtacga gcaggcaggg ccaagctt
 1608

<210> 1238

<211> 458

<212> PRT

<213> Homo sapiens

<400> 1238

Met	Cys	Gln	Leu	Gly	Leu	His	Gln	Lys	Ala	Asn	Arg	Leu	Pro	Glu	Ile	1	5	10	15
Gln	Gln	Pro	Leu	Cys	Arg	Lys	Glu	Gly	Leu	Cys	Gln	Ile	Val	Arg	Arg	20	25	30	
Phe	Pro	Glu	Leu	Gln	Leu	Pro	Val	Ser	Pro	Ser	Val	Cys	Leu	Asp	Gln	35	40	45	
Gly	Met	Gln	Leu	Lys	Pro	Ser	Thr	Ser	Ser	His	Leu	Leu	Lys	Thr	Val	50	55	60	
Lys	Pro	Arg	Val	Trp	Lys	Pro	Gly	Asp	Trp	Ser	Arg	Glu	Gln	Leu	Asn	65	70	75	80
Glu	Thr	Thr	Val	Leu	Ala	Pro	His	Glu	Thr	Ile	Phe	Arg	Ala	Lys	Asp	85	90	95	
Leu	Ser	Val	Ile	Leu	Lys	Ala	Tyr	Val	Leu	Val	Thr	Ser	Leu	Thr	Pro	100	105	110	
Leu	Arg	Ala	Phe	Ile	His	Ser	Thr	Gly	Thr	Val	Trp	Asn	Pro	Pro	Lys	115	120	125	
Lys	Lys	Arg	Phe	Thr	Val	Lys	Leu	Gln	Thr	Phe	Phe	Glu	Thr	Phe	Leu	130	135	140	
Arg	Ala	Ser	Ser	Pro	Gln	Gln	Ala	Phe	Asp	Ile	Met	Lys	Glu	Ala	Ile	145	150	155	160
Gly	Lys	Leu	Leu	Leu	Ala	Ala	Glu	Val	Phe	Ser	Glu	Thr	Ser	Thr	Leu	165	170	175	
Gly	Pro	Lys	Thr	Phe	His	Arg	Cys	Arg	Phe	Cys	Phe	Gln	Leu	Leu	Thr	180	185	190	
Phe	Asp	Ile	Gly	Tyr	Gly	Ser	Phe	Met	Tyr	Pro	Val	Val	Leu	Gln	Val	195	200	205	
His	Glu	His	Leu	Asn	Phe	Gln	Asp	Tyr	Asp	Asn	Met	Asp	Phe	Glu	Asp	210	215	220	
Gln	Asn	Thr	Glu	Glu	Phe	Leu	Leu	Asn	Asp	Thr	Phe	Asn	Phe	Leu	Phe	225	230	235	240
Pro	Asn	Glu	Ser	Ser	Leu	Ser	Ile	Phe	Ser	Glu	Ile	Phe	Gln	Arg	Leu	245	250	255	
Tyr	Arg	Ser	Asp	Val	Phe	Lys	Gly	Glu	Asn	Tyr	Gln	Lys	Glu	Leu	Asn				

```

                260                265                270
Gln Cys Leu Ser Leu Glu Glu Ile Asn Ser Ile Met Thr Phe Ile Lys
                275                280                285
Glu Leu Gly Ser Leu Gly Gln Phe Gln Leu Leu Phe Pro Ser Thr Thr
                290                295                300
Pro Gly Ile Gln Ser Leu Met His Glu Phe Tyr Asp Val Ala Asn Pro
305                310                315                320
Val Gly Asn Pro Gly Ser Val Leu Thr Gln Tyr Trp Ser Leu Leu Asn
                325                330                335
Val Phe Glu Gln Phe Gln Phe Met Asn Lys Lys Thr Gln Pro His Pro
                340                345                350
Leu Glu Trp Asn Ser Phe Thr Glu Asp Lys Asn Ile Glu Lys Pro Gln
                355                360                365
Val Pro Phe Asp Ala Ile Glu Asn Lys Lys Ala Ala Val Pro Gln Ile
                370                375                380
Lys Asn Glu Asn Lys Glu Ile His Cys Ser Asp Asp Glu Asn Thr Pro
385                390                395                400
Cys His Ile Lys Gln Ile Phe Thr His Pro His Leu Glu Leu Asn Pro
                405                410                415
Asp Phe His Pro Lys Ile Lys Asp Tyr Tyr Cys Glu Val Pro Phe Asp
                420                425                430
Val Val Thr Val Thr Ile Gly Val Glu Thr Pro Lys Cys Leu Cys Lys
                435                440                445
Val His Leu Tyr Glu Gln Ala Gly Pro Ser
                450                455

```

<210> 1239

<211> 447

<212> DNA

<213> Homo sapiens

<400> 1239

```

atacctactg aacgtgaacg aacagaaagg ctaattaaaa ccaaattaag ggagatcatg
60
atgcagaagg atttggagaa tattacatcc aaagagataa gaacagagtt ggaaatgcaa
120
atgggtgtgca acttgcgga attcaaggaa tttatagaca atgaaatgat agtgcctctt
180
ggcctcaatgg atagccctac acagatatct gagcatgtgt tcctgggctc agaatggaat
240
gcctccaact tagaggactt acagaaccga ggggtacggt atatcttgaa tgcactcga
300
gagatagata actttttccc aggagtcttt gaggatcata acattcgggt atatgatgaa
360
gaggcaacgg atctcctggc gtactggaat gacacttaca aattcatctc taaagcaaag
420
aaacatggat ctaaatgcct tgtgcac
447

```

<210> 1240

<211> 149

<212> PRT

<213> Homo sapiens

<400> 1240
 Ile Pro Thr Glu Arg Glu Arg Thr Glu Arg Leu Ile Lys Thr Lys Leu
 1 5 10 15
 Arg Glu Ile Met Met Gln Lys Asp Leu Glu Asn Ile Thr Ser Lys Glu
 20 25 30
 Ile Arg Thr Glu Leu Glu Met Gln Met Val Cys Asn Leu Arg Glu Phe
 35 40 45
 Lys Glu Phe Ile Asp Asn Glu Met Ile Val Ile Leu Gly Gln Met Asp
 50 55 60
 Ser Pro Thr Gln Ile Phe Glu His Val Phe Leu Gly Ser Glu Trp Asn
 65 70 75 80
 Ala Ser Asn Leu Glu Asp Leu Gln Asn Arg Gly Val Arg Tyr Ile Leu
 85 90 95
 Asn Val Thr Arg Glu Ile Asp Asn Phe Phe Pro Gly Val Phe Glu Tyr
 100 105 110
 His Asn Ile Arg Val Tyr Asp Glu Glu Ala Thr Asp Leu Leu Ala Tyr
 115 120 125
 Trp Asn Asp Thr Tyr Lys Phe Ile Ser Lys Ala Lys Lys His Gly Ser
 130 135 140
 Lys Cys Leu Val His
 145

<210> 1241
 <211> 489
 <212> DNA
 <213> Homo sapiens

<400> 1241
 acgcgtgtgc agcgtatcca gcaccgtcct cagaataata gctgtgaaaa ggaggaaggg
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 aactaggcag acagaccgac agataggggg aaaccgggat gtttaatgtg tccgaacaag
 120
 taggaagatc aatgaggcgc gagtgtgtgt gtgtacgtgt gcgcgtgtgt gtgtgagaga
 180
 gagagaaaga aagaagaaag gtcccgattg caacgtgtca gatcttgcaa cttccccccc
 240
 acccaacaca acaaccctca gacacaaaaa caccattgct gactgatacc ccagggtcttc
 300
 aggggttaaag gaaccgtgtg ttggcagcgc aattgtgcag acgctgtaag gccaaaacga
 360
 ggatttgtgt tgtgaggtcg gtggtgcgtt cttttctttt ttttctcgcc tgttttcccg
 420
 gagtgcctgg gttgcgagaa aggcgcacgc caggctgtgc agccgaatcg cttcgcaatt
 480
 attcatgct
 489

<210> 1242
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400> 1242
 Met Asn Asn Cys Glu Ala Ile Arg Leu His Ser Leu Arg Cys Ala Phe

```

      1             5             10             15
Leu Ala Thr Gln Ala Leu Arg Glu Asn Arg Arg Glu Glu Lys Glu Lys
      20             25             30
Asn Ala Pro Pro Thr Ser Gln His Lys Ser Ser Phe Trp Pro Tyr Ser
      35             40             45
Val Cys Thr Ile Ala Leu Pro Thr His Gly Ser Phe Asn Pro Glu Asp
      50             55             60
Leu Gly Tyr Gln Ser Ala Met Val Phe Leu Cys Leu Arg Val Val Val
      65             70             75             80
Leu Gly Gly Gly Lys Val Ala Arg Ser Asp Thr Leu Gln Ser Gly Pro
      85             90             95
Phe Phe Phe Leu Ser Leu Ser Leu Thr His Thr Arg Ala His Val His
      100            105            110
Thr His Thr Arg Ala Ser Leu Ile Phe Leu Leu Val Arg Thr His
      115            120            125

```

<210> 1243

<211> 390

<212> DNA

<213> Homo sapiens

<400> 1243

```

ntagactccg tcgatccct catggagaat ccagtgtgcc aggtcccttc ggcgtactgg
60
gagatgatat acctaccggg aatgttcact gtctacttcg atggccagtt ctgggtcgga
120
gtcctagaga ggcgcgacga gggtttggtg cgtgccgtaa aagtcacggt tggcgccgaa
180
ccgtctgaca cggaattgta cgggtggggt agccgtcatg gcaacgcact tatagagcga
240
ttggagtcta ccgctgctgt cctaccacc cgcagtcctc gagccaagcg actgaacccc
300
aagagggcgt tacgagatgc agcgcgagct gcccaagcac accgtgccag cagncgcga
360
caggccgcga ttaaggccga tcaggaagct
390

```

<210> 1244

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1244

```

Xaa Asp Ser Val Asp Pro Leu Met Glu Asn Pro Val Cys Gln Val Pro
  1             5             10             15
Ser Ala Tyr Trp Glu Met Ile Tyr Leu Pro Gly Met Phe Thr Val Tyr
      20             25             30
Phe Asp Gly Gln Phe Trp Val Gly Val Leu Glu Arg Arg Asp Glu Gly
      35             40             45
Leu Val Arg Ala Val Lys Val Thr Phe Gly Ala Glu Pro Ser Asp Thr
      50             55             60
Glu Leu Tyr Gly Trp Val Ser Arg His Gly Asn Ala Leu Ile Glu Arg
      65             70             75             80
Leu Glu Ser Thr Ala Ala Val Pro Thr Thr Arg Ser Pro Arg Ala Lys

```

```

      85              90              95
Arg Leu Asn Pro Lys Arg Ala Leu Arg Asp Ala Ala Arg Ala Ala Gln
      100              105              110
Ala His Arg Ala Ser Thr Xaa Ala Gln Ala Ala Ile Lys Ala Asp Gln
      115              120              125
Glu Ala
      130

```

<210> 1245
 <211> 339
 <212> DNA
 <213> Homo sapiens

```

<400> 1245
gccaagcagc aaaaaccaca gatcattgct atgggaaatg tgtcattttc ttgttcacaa
60
ccacaatcta tgcccgtagc ttttctgagc tccaggagtt ttttagcact gccagacttc
120
tctggagagg aggagggtttc tgccactttt caatttcgaa cttggaataa ggcagggtt
180
ctgctgttca gtgaacttca gctgatttca gggggtatcc tctcttttct gagtgatgga
240
aaacttaagt cgaatctcta ccagccaaga aaattaccca gtgacatcac agcagggtgc
300
gaattaaatg atgggcagtg gcattctgtc tctttatct
339

```

<210> 1246
 <211> 113
 <212> PRT
 <213> Homo sapiens

```

<400> 1246
Ala Lys Gln Gln Lys Pro Gln Ile Ile Ala Met Gly Asn Val Ser Phe
  1              5              10              15
Ser Cys Ser Gln Pro Gln Ser Met Pro Val Thr Phe Leu Ser Ser Arg
      20              25              30
Ser Phe Leu Ala Leu Pro Asp Phe Ser Gly Glu Glu Glu Val Ser Ala
      35              40              45
Thr Phe Gln Phe Arg Thr Trp Asn Lys Ala Gly Leu Leu Leu Phe Ser
      50              55              60
Glu Leu Gln Leu Ile Ser Gly Gly Ile Leu Leu Phe Leu Ser Asp Gly
      65              70              75              80
Lys Leu Lys Ser Asn Leu Tyr Gln Pro Arg Lys Leu Pro Ser Asp Ile
      85              90              95
Thr Ala Gly Val Glu Leu Asn Asp Gly Gln Trp His Ser Val Ser Leu
      100              105              110
Ser

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<210> 1247
 <211> 366
 <212> DNA
 <213> Homo sapiens

<400> 1247

ttgacctcca acccgggcac ggcgcatcctg cccagatcc cgatggatgg gcatgacctc
 60
 aacccgggtgt ggcgggacgt cggcctgac gtgcaccgc cgatgctcta catgggctac
 120
 gtcggtttct ccgtggcctt tgcgtttgcc atcgccgcct tgcctggcgg gcgcctcgat
 180
 gcggcctggg cgcgctggtc ggggccatgg accattgtgg cctgggcgtt cctcggtatc
 240
 ggtatcacc cgggttcgtg gtgggcctac tacgaactcg gctggngcgg ctggtgggtc
 300
 tgggaccccg gggaaaaccc cttcttcatg ccctggctgg ggggcacccc gctgattcac
 360
 tcgctg
 366

<210> 1248

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1248

Leu	Thr	Ser	Asn	Pro	Gly	Thr	Arg	Ile	Leu	Pro	Gln	Ile	Pro	Met	Asp
1				5				10					15		
Gly	His	Asp	Leu	Asn	Pro	Val	Trp	Arg	Asp	Val	Gly	Leu	Ile	Val	His
			20					25					30		
Pro	Pro	Met	Leu	Tyr	Met	Gly	Tyr	Val	Gly	Phe	Ser	Val	Ala	Phe	Ala
			35				40					45			
Phe	Ala	Ile	Ala	Ala	Leu	Leu	Gly	Gly	Arg	Leu	Asp	Ala	Ala	Trp	Ala
	50					55				60					
Arg	Trp	Ser	Arg	Pro	Trp	Thr	Ile	Val	Ala	Trp	Ala	Phe	Leu	Gly	Ile
65					70					75				80	
Gly	Ile	Thr	Leu	Gly	Ser	Trp	Trp	Ala	Tyr	Tyr	Glu	Leu	Gly	Trp	Xaa
			85					90					95		
Gly	Trp	Trp	Phe	Trp	Asp	Pro	Gly	Glu	Asn	Pro	Phe	Phe	Met	Pro	Trp
			100					105					110		
Leu	Gly	Gly	Thr	Pro	Leu	Ile	His	Ser	Leu						
			115					120							

<210> 1249

<211> 374

<212> DNA

<213> Homo sapiens

<400> 1249

acgcgtgtcc tcaacaccct ggcgcccacg ctgattgccg tggaaccggg gccggcaatg
 60
 ggcgcgcagt tgagcaagct gctgccggat gtgcacctgg tcaatggcac tgccgaggcc
 120
 attccactgg aaagcgccgt ggcggatgcy gtggtgtgcy cacaagcctt ccattgggtt
 180
 tccagcgagg cggccctggc ggaaatccat cgggtactca aaccggatgg gcgcctgggg
 240

ctggtgtgga atgtgcgcga cgagtcggtg gattgggtcg ccgccattac tcaaatac
 300
 acgccttatg aaggcgacac gccgcgcttt cataccggcc gttggcgcga agccttcaact
 360
 ggcgagtatt ttg
 374

<210> 1250
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 1250
 Thr Arg Val Leu Asn Thr Leu Ala Pro Thr Leu Ile Ala Val Glu Pro
 1 5 10 15
 Val Pro Ala Met Gly Ala Gln Leu Ser Lys Leu Leu Pro Asp Val His
 20 25 30
 Leu Val Asn Gly Thr Ala Glu Ala Ile Pro Leu Glu Ser Ala Val Ala
 35 40 45
 Asp Ala Val Val Cys Ala Gln Ala Phe His Trp Phe Ser Ser Glu Ala
 50 55 60
 Ala Leu Ala Glu Ile His Arg Val Leu Lys Pro Asp Gly Arg Leu Gly
 65 70 75 80
 Leu Val Trp Asn Val Arg Asp Glu Ser Val Asp Trp Val Ala Ala Ile
 85 90 95
 Thr Gln Ile Ile Thr Pro Tyr Glu Gly Asp Thr Pro Arg Phe His Thr
 100 105 110
 Gly Arg Trp Arg Glu Ala Phe Thr Gly Glu Tyr Phe
 115 120

<210> 1251
 <211> 742
 <212> DNA
 <213> Homo sapiens

<400> 1251
 accggtctct tcttcggaaa ggcagggccg aggggcttgc ggggcagcca tggaggcgac
 60
 gcggaggcgg cagcacgtgg gagcgacggg cgggccaggc gcgcagttgg gcgcctcctt
 120
 ccttcgaggc caggcatggc tctgtgagcg ctgatgaggc tgcccgcacg gctcccttcc
 180
 acctcgacct ctggttctac ttcacactgc agaactgggt tctggacttt gggcgtccca
 240
 ttgccatgct ggtattccct ctcgagtggg ttccactcaa caagcccagt gttggggact
 300
 acttccacat ggcctacaac gtcatcacgc cctttctctt gctcaagctc atcgagcggg
 360
 cccccgcac cctgctacgc tccatcacgt acgtgagcat catcatcttc atcatgggtg
 420
 ccagcatcca cctgggtggg gactctgtca accaccgctt gctcttcagt ggctaccage
 480
 accacctgtc tgtccgtgag aaccccatca tcaagaatct caagccggag acgctgatcg
 540

actcctttga gctgctctac tattatgatg agtacctggg tcactgcatg tggtacatcc
 600
 ccttcttcct catcctcttc atgtacttca gcggctgctn ttactgcctc taaagctgag
 660
 agcttgatgc cagggcctgc cctgctcctg gtggcaccca gtggcctgta ctactggtag
 720
 ctggtcaccg agggccagat ct
 742

<210> 1252

<211> 80

<212> PRT

<213> Homo sapiens

<400> 1252

Met	Arg	Leu	Pro	Ala	Arg	Leu	Pro	Ser	Thr	Ser	Thr	Ser	Gly	Ser	Thr
1				5				10					15		
Ser	His	Cys	Arg	Thr	Gly	Phe	Trp	Thr	Leu	Gly	Val	Pro	Leu	Pro	Cys
			20				25					30			
Trp	Tyr	Ser	Leu	Ser	Ser	Gly	Phe	His	Ser	Thr	Ser	Pro	Val	Leu	Gly
		35				40					45				
Thr	Thr	Ser	Thr	Trp	Pro	Thr	Ser	Ser	Arg	Pro	Phe	Ser	Cys	Ser	
	50				55				60						
Ser	Ser	Ser	Ser	Gly	Pro	Pro	Ala	Pro	Cys	Tyr	Ala	Pro	Ser	Arg	Thr
65				70				75						80	

<210> 1253

<211> 675

<212> DNA

<213> Homo sapiens

<400> 1253

gggccccctc ccaggcgctt tctgggagct tttagaactg cgctctgaag tttccagaga
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 gcgaggagct tttgcggcag gcagagacaa tggaagaaaa tgaaagccag aaatgtgagc
 120
 cgtgccttcc ttactcagca gacagaagac agatgcagga acaaggcaaa ggcaatctgc
 180
 atgtaacatc accagaagat gcagaatgcc gcagaaccaa ggaacgcctt tctaattggaa
 240
 acagtcgtgg ttcagtttcc aagtcttccc gcaatatccc aaggagacac accctagggg
 300
 ggccccgaag ttccaaggaa atactgggaa tgcaaacatc tgagatggat cggaagagag
 360
 gaaaaagcgt tcctagaaca tctgaagcag aagtaccccc accacgcctc tgcaatcatg
 420
 ggtcaccaag agaggctgag agaccagaca aggatcccca aactgtctca cagtctctca
 480
 ccaccagtg tgggtgaccc ggtcgagcat ttatcagaga cgtccgctga ttctttggaa
 540
 gccatgtctg agggggatgc tccaaccctt ttttccagag gcagccggac tcgtgcgagc
 600
 cttctgtgg tgaggtcaac caaccagacg aaagaaagat ctctgggggt tctctatctc
 660

cagtatggag atgaa
675

<210> 1254
<211> 86
<212> PRT
<213> Homo sapiens

<400> 1254
Met Gly His Gln Glu Arg Leu Arg Asp Gln Thr Arg Ile Pro Lys Leu
1 5 10 15
Ser His Ser Pro Gln Pro Pro Ser Val Gly Asp Pro Val Glu His Leu
20 25 30
Ser Glu Thr Ser Ala Asp Ser Leu Glu Ala Met Ser Glu Gly Asp Ala
35 40 45
Pro Thr Pro Phe Ser Arg Gly Ser Arg Thr Arg Ala Ser Leu Pro Val
50 55 60
Val Arg Ser Thr Asn Gln Thr Lys Glu Arg Ser Leu Gly Val Leu Tyr
65 70 75 80
Leu Gln Tyr Gly Asp Glu
85

<210> 1255
<211> 401
<212> DNA
<213> Homo sapiens

<400> 1255
ncgccgatta ccaaggctat ggatgtgtgg gccttgggcg taacgtata ctgtctgctg
60
ttcgggtcgag tgccatttga tgcagagacg gagtacttgc tgctggaaag tatcctgcat
120
gacgattatg ccgtcccgcac gcacatgggt agcgaccgcg tgttggtagg cccgcgacca
180
gcacgttggc cctcgtcgca agagacgcc aacgtgccgc tgtccggcga ggcgcgtgca
240
gtacgccatc tgctcgatgc ccttctcgac aaggatccag cgacgcgcct cactctcgat
300
cgtgttataa cacacccatg gctcgtggca gagtcattgt aatagtagca attgtatata
360
ccctcatcac caagatggcc aaagcggtag aaggcccgcg g
401

<210> 1256
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1256
Xaa Pro Ile Thr Lys Ala Met Asp Val Trp Ala Leu Gly Val Thr Leu
1 5 10 15
Tyr Cys Leu Leu Phe Gly Arg Val Pro Phe Asp Ala Glu Thr Glu Tyr
20 25 30
Leu Leu Leu Glu Ser Ile Leu His Asp Asp Tyr Ala Val Pro Thr His

```

          35          40          45
Met Gly Ser Asp Arg Val Leu Val Gly Pro Arg Pro Ala Arg Trp Pro
   50          55          60
Ser Ser Gln Glu Thr Pro Asn Val Pro Leu Ser Gly Glu Ala His Ala
65          70          75          80
Val Arg His Leu Leu Asp Ala Leu Leu Asp Lys Asp Pro Ala Thr Arg
          85          90          95
Leu Thr Leu Asp Arg Val Ile Thr His Pro Trp Leu Val Ala Glu Ser
          100          105          110
Trp

```

<210> 1257

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1257

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cgcggtacagc tgattgaagg tgatgtcgcc aacgccgacc tgggtggcgca agccgccatc
60
ggcgccacgg cggtggtgca tttggcagcg gtggcttcgg tgcaagcctc ggtggatgac
120
ccggtcagca cgcgccagag caattttgtc ggcaccttga atgtctgcga agccatgcgc
180
aaggccggtg tgaagcgtgt ggtatttgc tccagcgttg cggtgtatgg caacaatggc
240
gagggcgctt cgattgacga agagaccatc aaggccccgc tgacgcctta cgcg
294

```

<210> 1258

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1258

```

Arg Val Gln Leu Ile Glu Gly Asp Val Ala Asn Ala Asp Leu Val Ala
 1          5          10          15
Gln Ala Ala Ile Gly Ala Thr Ala Val Val His Leu Ala Ala Val Ala
          20          25          30
Ser Val Gln Ala Ser Val Asp Asp Pro Val Ser Thr Arg Gln Ser Asn
          35          40          45
Phe Val Gly Thr Leu Asn Val Cys Glu Ala Met Arg Lys Ala Gly Val
          50          55          60
Lys Arg Val Val Phe Ala Ser Ser Val Ala Val Tyr Gly Asn Asn Gly
65          70          75          80
Glu Gly Ala Ser Ile Asp Glu Glu Thr Ile Lys Ala Pro Leu Thr Pro
          85          90          95
Tyr Ala

```

<210> 1259

<211> 417

<212> DNA

<213> Homo sapiens

<400> 1259
 nnacactcta gcctctgact caaggaagct gccagggctc ttgcccttcg gtttgggggg
 60
 atcccgctctc ccttcgtctg gagcagacat agtgagaacg tgagaagctg caggcggtggc
 120
 ctcaccgtgg tgtgttccaa gatgtccagg gccaaaggatg ccgtgtcctc cgggggtggcc
 180
 agcgtgggtgg acgtgggctaa gggagtgggtc caggaggaggcc tggacaccac tcggtctgca
 240
 cttacgggca ccaaggaggc ggtgtccagc ggggtcacag gggccatgga catggctaag
 300
 ggggcccgtcc aaggggggtct ggacacctcg aaggctgtcc tcaccggcac caaggacacg
 360
 gtgtccactg ggctcacggg ggcagtgaat gtggccaaag ggcccgtaca ggccggc
 417

<210> 1260
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 1260
 Leu Lys Glu Ala Ala Gln Gly Leu Ala Leu Arg Phe Gly Gly Ile Pro
 1 5 10 15
 Ser Pro Phe Val Trp Ser Arg His Ser Glu Asn Val Arg Ser Cys Arg
 20 25 30
 Arg Gly Leu Thr Val Val Cys Ser Lys Met Ser Arg Ala Lys Asp Ala
 35 40 45
 Val Ser Ser Gly Val Ala Ser Val Val Asp Val Ala Lys Gly Val Val
 50 55 60
 Gln Gly Gly Leu Asp Thr Thr Arg Ser Ala Leu Thr Gly Thr Lys Glu
 65 70 75 80
 Ala Val Ser Ser Gly Val Thr Gly Ala Met Asp Met Ala Lys Gly Ala
 85 90 95
 Val Gln Gly Gly Leu Asp Thr Ser Lys Ala Val Leu Thr Gly Thr Lys
 100 105 110
 Asp Thr Val Ser Thr Gly Leu Thr Gly Ala Val Asn Val Ala Lys Gly
 115 120 125
 Pro Val Gln Ala Gly
 130

<210> 1261
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1261
 ngtgcacgtg ccgttcggca tcaggagatg aacatggatt tgaacgctga agtcgatcag
 60
 ctgggtccgcc aatcccagac ctggatcccc ttgatcatgg agtacggcag ccgcctgctg
 120tgaccctggc ggtcggctgg tggatcgaca acaaggtcag cgcccgcctg 180
 ggcaaactgg taggcctgcg caacgccgac ctggcactgc aaggctttat cagcaccttg
 240

tcgaacatcg ggctgaaagt gctgctgttc gtcagtgtgg cgtcgatgat cggcattgag
 300
 accacctcgt tcgtcgcgga catcggtgct
 330

<210> 1262
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1262
 Xaa Ala Arg Ala Val Arg His Gln Glu Met Asn Met Asp Leu Asn Ala
 1 5 10 15
 Glu Val Asp Gln Leu Val Arg Gln Ser Gln Thr Trp Ile Pro Leu Ile
 20 25 30
 Met Glu Tyr Gly Ser Arg Leu Leu Leu Ala Leu Leu Thr Leu Ala Val
 35 40 45
 Gly Trp Trp Ile Asp Asn Lys Val Ser Ala Arg Leu Gly Lys Leu Val
 50 55 60
 Gly Leu Arg Asn Ala Asp Leu Ala Leu Gln Gly Phe Ile Ser Thr Leu
 65 70 75 80
 Ser Asn Ile Gly Leu Lys Val Leu Leu Phe Val Ser Val Ala Ser Met
 85 90 95
 Ile Gly Ile Glu Thr Thr Ser Phe Val Ala Asp Ile Gly Ala
 100 105 110

<210> 1263
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 1263
 acgcgtggac gatggacttc gtcggtctgc ggtacgacga agggctcaac attgccggtg
 60
 gcatcgtatga tgagtttctg cgcctgggca acacctagca gcaatggcat cgatagtcac
 120
 tgcccagcct gctccatttc gacgacgatg gtcgccgggt tcagtttctt ctcgctccac
 180
 gtcaacagac cgtcaccgtg gttgacgac tcgccggtgg aggcgtcctt gacgacgac
 240
 tggccacgcg ccagggaata catctcccca tccacccaaa agaacgcccc caagctgggc
 300
 atcttggeca gcccgatgat cgagagggtt tcaacaagcg actcgggac c
 351

<210> 1264
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 1264
 Met Pro Ser Leu Gly Ala Phe Phe Trp Val Asp Gly Glu Met Tyr Ser
 1 5 10 15
 Leu Ala Arg Gly Gln Ile Val Val Lys Asp Ala Ser Thr Gly Glu Ile

```

                20                25                30
Val Asn His Gly Asp Gly Leu Leu Thr Trp Ser Glu Lys Lys Leu Asn
                35                40                45
Pro Ala Thr Ile Val Val Glu Met Glu Gln Ala Gly Gln Gly Leu Ser
                50                55                60
Met Pro Leu Leu Leu Gly Val Ala Gln Ala Ser Lys Leu Ile Ile Asp
65                70                75                80
Ala Thr Gly Asn Val Glu Pro Phe Val Val Pro Gln Thr Asp Glu Val
                85                90                95
His Arg Pro Arg
                100

```

<210> 1265
 <211> 318
 <212> DNA
 <213> Homo sapiens

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<400> 1265
accggtgtat gcaactgaaa tgctgtccga tatgcctgcg ctccagctcg tgaatcgaaa
60
gttgataac gctcgcttgg tggaatcgtc gctacggaag cttatcaagg atacggatgc
120
tgctgcaccg ccaaaattat ggacgcccc cgacccact cgctctgacg ataccattgc
180
acagccgaaa gtgcaaccag cccaagcagt gggagatgac tcgatcatgt cggtcgatga
240
gcttgatgca accgtccatg acatgccact caccacgaca ctcgacaacg tgggtcgctc
300
agatccatcg cgacgcgt
318

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<210> 1266
 <211> 99
 <212> PRT
 <213> Homo sapiens

```

<400> 1266
Met Leu Ser Asp Met Pro Ala Leu Gln Leu Val Asn Arg Lys Leu Asp
1                5                10                15
Asn Ala Arg Leu Val Glu Ser Ser Leu Arg Lys Leu Ile Lys Asp Thr
                20                25                30
Asp Ala Ala Ala Pro Pro Lys Leu Trp Thr Pro Pro Asp Pro Thr Arg
                35                40                45
Ser Asp Asp Thr Ile Ala Gln Pro Lys Val Gln Pro Ala Gln Ala Val
50                55                60
Gly Asp Asp Ser Ile Met Ser Val Asp Glu Pro Asp Ala Thr Val His
65                70                75                80
Asp Met Pro Leu Thr Thr Thr Leu Asp Asn Val Gly Arg Ser Asp Pro
                85                90                95
Ser Arg Arg

```

<210> 1267
 <211> 343

<212> DNA

<213> Homo sapiens

<400> 1267

```

nggacacttg tgggaaatgc cccacagcct gtgtttttat tccccttggtg aacacttggtg
60
ggaactgtcc caccgcccgt gtttctgtgc gcctgcagac actcgtggga aatgccccac
120
aacctgtggt tttgttcccc ttgtgaacac tcgtgggaaa tgccccacaa cctgtgtttt
180
tattccccct gtgaacactc gtgggaaatg tcccatggcc cgtgtttccg tgcacctgcg
240
gatactcatc aaacaccagg ctgtcattgg ggacaggggtg agctctggct gttggtgcag
300
catggttagga agagcaccaa gtcttggtgact ctgttgattt ata
343

```

<210> 1268

<211> 106

<212> PRT

<213> Homo sapiens

<400> 1268

```

Met Pro His Ser Leu Cys Phe Tyr Ser Pro Cys Glu His Leu Trp Glu
1      5      10      15
Leu Ser His Gly Pro Cys Phe Cys Ala Pro Ala Asp Thr Arg Gly Lys
20      25      30
Cys Pro Thr Thr Cys Val Phe Val Pro Leu Val Asn Thr Arg Gly Lys
35      40      45
Cys Pro Thr Thr Cys Val Phe Ile Pro Leu Val Asn Thr Arg Gly Lys
50      55      60
Cys Pro Met Ala Arg Val Ser Val His Leu Arg Ile Leu Ile Lys His
65      70      75      80
Gln Ala Val Ile Gly Asp Arg Val Ser Ser Gly Cys Trp Cys Ser Met
85      90      95
Val Gly Arg Ala Pro Ser Pro Gly Leu Cys
100      105

```

<210> 1269

<211> 391

<212> DNA

<213> Homo sapiens

<400> 1269

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tcgcgatccg gagcgatcgg tgctgcagat ggctggcgac gccctgcggg gcgcattgcg
60
ggacgccgac ctggagccgg ccgccctaga cgggctgac gtccagggtgg ggtccccccg
120
cggcgccggac tacgacaccg tgtccgaaac ctttgggtct tcgccacaat tctgcagcca
180
gacctggggc gcacggccgg ttcaccgcaa cggtgatcct ggcagcggcc atggcgggtg
240
ccagcggcct cgcgcggcgg gtggcttgcc tcatgggcat gaagaattcg gacctcgggc
300

```

ggttgggtga ggcggaacaat ccctttcatc atgagcaatt ccgggagaat ggcgggccgc
 360
 acggggaaga gggttggatc ggcatggcct c
 391

<210> 1270
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1270
 Met Met Lys Gly Ile Val Arg Leu Thr Gln Pro Pro Glu Val Arg Ile
 1 5 10 15
 Leu His Ala His Glu Ala Ser His Pro Pro Arg Glu Ala Ala Gly His
 20 25 30
 Arg His Gly Arg Cys Gln Asp His Arg Cys Gly Glu Pro Ala Val Arg
 35 40 45
 Pro Arg Ser Gly Cys Arg Ile Val Ala Lys Asp Gln Arg Phe Arg Thr
 50 55 60
 Arg Cys Arg Ser Pro Arg Arg Gly Gly Thr Pro Pro Gly Arg Ser Ala
 65 70 75 80
 Arg Leu Gly Arg Pro Ala Pro Gly Arg Arg Pro Ala Met Arg Pro Ala
 85 90 95
 Gly Arg Arg Gln Pro Ser Ala Ala Pro Ile Ala Pro Asp Arg
 100 105 110

<210> 1271
 <211> 661
 <212> DNA
 <213> Homo sapiens

<400> 1271
 acgcgtcggtt actggccacc tgcgagcgca ccagggtagg cagcactcgg tctccgctga
 60
 accagaaagc gtcacgggg tggtagacga gaacggggcga tgttggtggtg ggacggataa
 120
 ccccggttg cgtcaccata tggcccaacta aagagttcac cagggttgat ttaccagccc
 180
 cggtcgaccc tcctaccacc gccagaagcg gcgcatcaat agtctctaag cgcggcaaaa
 240
 tatagtcggtt aagctgggta gcgatgcgtc gtgccagccc ggcttgagta atagcctccg
 300
 gcaaatccaa ggggaactgg gcctgacgca ggttggtgccg cagatcggtc aacgacagca
 360
 gtatctgctc agtggtcatg gtgatccttc ctggtcactc gtcaggcctg tggcggcgcc
 420
 cactgcaact cggttggtgac cggctgggtg cgacgtcgct tgaggaaatgc gggcagtctc
 480
 ggcttcgaca atttggcacc tcgggcgacg gtgatagccg ccgggcgcag cacgttcata
 540
 cgggttgatga gtcgatctg aagcggacca ggatcatcgt ccaaccacg cacaatggcg
 600
 tcacgaagat aagcaagatc tgtcccaacg cgcaggaact ctaacgtgtg ccaccaccgg
 660

t
661

<210> 1272
<211> 126
<212> PRT
<213> Homo sapiens

<400> 1272
Met Asn Thr Glu Gln Ile Leu Leu Ser Leu Thr Asp Leu Arg His Asn
1 5 10 15
Leu Arg Gln Ala Gln Phe Pro Leu Asp Leu Pro Glu Ala Ile Thr Gln
20 25 30
Ala Gly Leu Ala Arg Arg Ile Ala Asn Gln Leu Asn Asp Tyr Ile Leu
35 40 45
Pro Arg Leu Glu Thr Ile Asp Ala Pro Leu Leu Ala Val Val Gly Gly
50 55 60
Ser Thr Gly Ala Gly Lys Ser Thr Leu Val Asn Ser Leu Val Gly His
65 70 75 80
Met Val Thr Gln Pro Gly Val Ile Arg Pro Thr Thr Thr Ser Pro Val
85 90 95
Leu Val His His Pro Asp Asp Ala Phe Trp Phe Asp Gly Asp Arg Val
100 105 110
Leu Pro Thr Leu Val Arg Ser Gln Val Ala Ser Asn Asp Ala
115 120 125

<210> 1273
<211> 489
<212> DNA
<213> Homo sapiens

<400> 1273
gccggcgaga ccggtgccgg aaagaccatg gtggtcaccg gtattggttt gctgctcggc
60
gacaaggctg acactggatt ggtccggcat ggctgcgac gtgccgtcgt cgaagccggt
120
ctcgacacgc ctgatgccgg tcgcgtcagc gagcttgagg gaacagtcga ggatggtgag
180
gttatctgag ctcgacacat cagcagtcgt cgctctcgag cgctgcttgg aggagctcaa
240
gttaccgcta gtcagctggc ccacatcggt ggggatcagg tgaccatcca tggccaatct
300
gaacaagtga ggttggtcga cgcagcgcgg cagctcgacg tcgttgaccg ggctgccgga
360
gatgagctgg caggctacct aagtcgacat gcacagctgt ggtcggagtt tcgtgctgca
420
tcccagcgtc ttcagcgctt caacgaggat cgcgctgggg ccgagatgga acgcgaggtg
480
cttacgcgt
489

<210> 1274
<211> 163
<212> PRT

<213> Homo sapiens

<400> 1274

Ala Gly Glu Thr Gly Ala Gly Lys Thr Met Val Val Thr Gly Ile Gly
 1 5 10 15
 Leu Leu Leu Gly Asp Lys Ala Asp Thr Gly Leu Val Arg His Gly Cys
 20 25 30
 Asp Arg Ala Val Val Glu Ala Val Leu Asp Thr Pro Asp Ala Gly Arg
 35 40 45
 Val Ser Glu Leu Gly Gly Thr Val Glu Asp Gly Glu Val Ile Cys Ala
 50 55 60
 Arg His Ile Thr Ser Arg Arg Ser Arg Ala Leu Leu Gly Gly Ala Gln
 65 70 75 80
 Val Thr Ala Ser Gln Leu Ala His Ile Val Gly Asp Gln Val Thr Ile
 85 90 95
 His Gly Gln Ser Glu Gln Val Arg Leu Val Asp Ala Ala Arg Gln Leu
 100 105 110
 Asp Val Val Asp Arg Ala Ala Gly Asp Glu Leu Ala Gly Tyr Leu Ser
 115 120 125
 Arg His Ala Gln Leu Trp Ser Glu Phe Arg Ala Ala Ser Gln Arg Leu
 130 135 140
 Gln Arg Leu Asn Glu Asp Arg Ala Gly Ala Glu Met Glu Arg Glu Val
 145 150 155 160
 Leu Thr Arg

<210> 1275

<211> 384

<212> DNA

<213> Homo sapiens

<400> 1275

nngctagcaa gtgcaagtac gagcaaaagt tatcagcaac agcgggaggc tgaacttctc
 60
 gtgcacggc tagaggggga aatgcacgca cacagcgacc cgaccccgtc gccacaacca
 120
 cccgaggatg cagggttgat tgatgttgcc ctgaaagagg cgaagaaagc ctttgatgaa
 180
 ggcaaggctg atctaattga taaactcaat caggagatac ttcgcctggc aaacgaattc
 240
 ggtgcgctcg ggcttgaatc tattgagctt ggctccgacg cgaagatggc agtacgcaaa
 300
 ggcaatcaga aatcagcggt cagcaggtcg actcccggtg aacgtctcag gctgcgcatt
 360
 gctacagcca tcgcgttggt acgc
 384

<210> 1276

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1276

Xaa Leu Ala Ser Ala Ser Thr Ser Lys Ser Tyr Gln Gln Gln Arg Glu

```

      1           5           10           15
Ala Glu Leu Leu Val Ala Arg Leu Glu Gly Glu Met His Ala His Ser
      20           25           30
Asp Pro Thr Pro Ser Pro Gln Pro Pro Glu Asp Ala Gly Leu Ile Asp
      35           40           45
Val Ala Leu Lys Glu Ala Lys Lys Ala Phe Asp Glu Gly Lys Val Asp
      50           55           60
Leu Met Asp Lys Leu Asn Gln Glu Ile Leu Arg Leu Ala Asn Glu Phe
      65           70           75           80
Gly Ala Leu Gly Leu Glu Ser Ile Glu Leu Gly Ser Asp Ala Lys Met
      85           90           95
Ala Val Arg Lys Gly Asn Gln Lys Ser Ala Phe Ser Arg Leu Thr Pro
      100          105          110
Gly Glu Arg Leu Arg Leu Arg Ile Ala Thr Ala Ile Ala Leu Leu Arg
      115          120          125

```

<210> 1277

<211> 392

<212> DNA

<213> Homo sapiens

<400> 1277

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cagtttcagc cccgctgtgt gtccccaatt cctgtctctc ctaccagccg gattcagaac
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ccagtggcct tcttcagctc tgttctgcct tctctccctg ccatcccacc caaaaatgcc
120
atggggctgc ctagaagtgc accatccatg ccatcccagg gattagcgaa gaaaaataca
180
aagtctcctc aaccagttaa tgatgataac attcgtgaaa ctaagaacgc agtgattcga
240
gacttgggga aaaaaataac tttcagtgat gtcagaccaa accagcagga gtacaaaatt
300
tcaagctttg agcagaggct gatgaatgaa atagagtttc gcttggaaacg tactcctgtt
360
gatgaatcac atgatgaaat tcaacatgat gg
392

```

<210> 1278

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1278

```

Gln Phe Gln Pro Arg Cys Val Ser Pro Ile Pro Val Ser Pro Thr Ser
  1           5           10           15
Arg Ile Gln Asn Pro Val Ala Phe Leu Ser Ser Val Leu Pro Ser Leu
      20           25           30
Pro Ala Ile Pro Pro Thr Asn Ala Met Gly Leu Pro Arg Ser Ala Pro
      35           40           45
Ser Met Pro Ser Gln Gly Leu Ala Lys Lys Asn Thr Lys Ser Pro Gln
      50           55           60
Pro Val Asn Asp Asp Asn Ile Arg Glu Thr Lys Asn Ala Val Ile Arg
      65           70           75           80
Asp Leu Gly Lys Lys Ile Thr Phe Ser Asp Val Arg Pro Asn Gln Gln

```

85 90 95
 Glu Tyr Lys Ile Ser Ser Phe Glu Gln Arg Leu Met Asn Glu Ile Glu
 100 105 110
 Phe Arg Leu Glu Arg Thr Pro Val Asp Glu Ser His Asp Glu Ile Gln
 115 120 125
 His Asp
 130

<210> 1279
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 1279
 atggagtcgc agactctccg ccacatgac gagggacgact gcgccgacaa cggcatccca
 60
 ctccccaacg tcaactccag gatcctctct aagggtcatcg agtactgcaa cagtcacgtc
 120
 cagcgcgcgcg ccaaaccgcg tgactccgct gcctccgagg gcggcgagga cctcaagagc
 180
 tgggacgcga agttcgtcaa ggtggaccag gctacgctct tcgacctcat cctgggtgcc
 240
 aactatctga acatcaaggg attgctggac ctgacctgcc agacgggtgc tgacatg
 297

<210> 1280
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 1280
 Met Glu Ser Gln Thr Leu Arg His Met Ile Glu Asp Asp Cys Ala Asp
 1 5 10 15
 Asn Gly Ile Pro Leu Pro Asn Val Asn Ser Arg Ile Leu Ser Lys Val
 20 25 30
 Ile Glu Tyr Cys Asn Ser His Val His Ala Ala Ala Lys Pro Ala Asp
 35 40 45
 Ser Ala Ala Ser Glu Gly Gly Glu Asp Leu Lys Ser Trp Asp Ala Lys
 50 55 60
 Phe Val Lys Val Asp Gln Ala Thr Leu Phe Asp Leu Ile Leu Ala Ala
 65 70 75 80
 Asn Tyr Leu Asn Ile Lys Gly Leu Leu Asp Leu Thr Cys Gln Thr Gly
 85 90 95
 Ala Asp Met

<210> 1281
 <211> 515
 <212> DNA
 <213> Homo sapiens

<400> 1281
 acgcgtgaag ggggcttttg aggggatggc ttctggactg cacgatgggt gaacacagtt
 60

ttttaaactc ttttccacat ctgtataggt ttgaaaatta tcaacaactc atggggaggg
 120
 tggcgtgccca ggtcatggct gcctggagcc cttctgagga gggccggctc aaccgaggac
 180
 gccctcccca ctaccaagta ggcactgcgg gcaggagtcg ccacccccac cccaaggaag
 240
 ttcagaacag gcaacaggag gaggctgact ccaacagagt tgggtgtcatc cggcgcacgc
 300
 ctaaggacgt cacaacacat caactctggg agcccaaggg ggtgtgtggg ccactcaagg
 360
 ggaagatgat ccagaagctc tgctccctcc ctttgctttt gaagaacaca ggagtgcac
 420
 gtggggaatc tacgggctta atttcttctt agtaacaggc atagtaggat caaaaaattt
 480
 ttgcttctaa tttttaaaaa cattcaatgt gtaca
 515

<210> 1282
 <211> 135
 <212> PRT
 <213> Homo sapiens

<400> 1282
 Met Gly Glu His Ser Phe Leu Asn Ser Phe Pro His Leu Tyr Arg Phe
 1 5 10 15
 Glu Asn Tyr Gln Gln Leu Met Gly Arg Val Ala Cys Gln Val Met Ala
 20 25 30
 Ala Trp Ser Pro Ser Glu Glu Gly Arg Leu Asn Arg Gly Arg Pro Pro
 35 40 45
 His Tyr Gln Val Gly Thr Ala Gly Arg Ser Arg His Pro His Pro Lys
 50 55 60
 Glu Val Gln Asn Arg Gln Gln Glu Glu Pro Asp Ser Asn Arg Val Gly
 65 70 75 80
 Val Ile Arg Arg Ile Ala Lys Asp Val Thr Thr His Gln Leu Trp Glu
 85 90 95
 Pro Lys Gly Val Cys Gly Pro Leu Lys Gly Lys Met Ile Gln Lys Leu
 100 105 110
 Cys Ser Leu Pro Leu Leu Leu Lys Asn Thr Gly Val Thr Arg Gly Glu
 115 120 125
 Ser Thr Gly Leu Ile Ser Ser
 130 135

<210> 1283
 <211> 296
 <212> DNA
 <213> Homo sapiens

<400> 1283
 gaattcctca caatgaactg cagtgtctgg aggaccagtt gggtagcctt actccgggctc
 60
 tccactgcag aacttatata tatatgcttt gtgcacacaa agaaaaacag cagcccaaaa
 120
 gaatcccggc tggggctctt aggagggagg aaagttccca caggtaactc actgggtaat
 180

tttaaagagc tcaggaaagg aaggaaggat ggctttttct cttgtgagtc aagacaaggc
 240
 cctgatgata accctcccag atcagaacgt aactttcaac ccacgagtcg tgctcn
 296

<210> 1284
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 1284
 Met Asn Cys Ser Val Trp Arg Thr Ser Trp Val Ala Leu Leu Arg Val
 1 5 10 15
 Ser Thr Ala Glu Leu Ile His Ile Cys Phe Val His Thr Lys Lys Asn
 20 25 30
 Ser Ser Pro Lys Glu Ser Arg Leu Gly Leu Leu Gly Gly Arg Lys Val
 35 40 45
 Pro Thr Gly Asn Ser Leu Val Asn Phe Lys Glu Leu Arg Lys Gly Arg
 50 55 60
 Lys Asp Gly Phe Phe Ser Cys Glu Ser Arg Gln Gly Pro Asp Asp Asn
 65 70 75 80
 Pro Pro Arg Ser Glu Arg Asn Phe Gln Pro Thr Ser Ala Ala
 85 90

<210> 1285
 <211> 526
 <212> DNA
 <213> Homo sapiens

<400> 1285
 gggcccccttc ttacctgccc cttccccgtg ccaccaaccc gtagacaggg agggcaagca
 60
 gtgaaaggtc catctagagg aggtaaaaga cagggtgag ggaaaacgcc ttgtacagtc
 120
 aggatggcag atgtactctg tcagggaaga cagccccaca gaaaaggctc ggcttggcca
 180
 agaagcaaca aaagggatc tacacctcag accaggagg gggaatgtgt acaaagattg
 240
 gatttactaa attcagagcc acagactttc aggtacttcg gtgaagatca gtgctctttc
 300
 aaaccacac ttcagaggca ggctttaaaa cgctgactt ctgtcagggc cacaggctgg
 360
 gctgccaaa gtcctacgg ggctggggga tccgagagag gacttccac tagtccaaga
 420
 tgtggtgact agtttcaagc cagagattga ggagcagacc tgatgccctt tcggggccct
 480
 gctaagaacc tgattcgagg aaaaggaagt gaagacagta acgcgt
 526

<210> 1286
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1286

```

Met Ala Asp Val Leu Cys Gln Gly Arg Gln Pro His Arg Lys Gly Ser
 1           5           10           15
Ala Trp Pro Arg Ser Asn Lys Arg Asp Ser Thr Pro Gln Thr Arg Glu
          20           25           30
Gly Glu Cys Val Gln Arg Leu Asp Leu Leu Asn Ser Glu Pro Gln Thr
          35           40           45
Phe Arg Tyr Phe Gly Glu Asp Gln Cys Ser Phe Lys Pro Thr Leu Gln
          50           55           60
Arg Gln Ala Leu Lys Arg Leu Thr Ser Val Arg Ala Thr Gly Trp Ala
65           70           75           80
Ala Gln Ser Ser Tyr Gly Ala Gly Gly Ser Glu Arg Gly Leu Pro Thr
          85           90           95
Ser Pro Arg Cys Gly Asp
          100

```

<210> 1287

<211> 333

<212> DNA

<213> Homo sapiens

<400> 1287

```

acgcgtgaag gggagaggca gctccagggtg gaggggaagtg catgaggaag cagagaggca
60
ggcgacaggc agcgtggctg gggctgggca ggccttcag tttgattgca gccagaggt
120
caggtgagaa gaaggtacaa caagcaagga agggcccagg aagccactgg ggggtgttga
180
gccattgaat attctggatt ttaggacatt tctgtggctg actccactgc catcagagtt
240
catccacccc aactccagcc tgagagtgtc ggggcactgg gcaactccgga attcttcaaa
300
gctctgatgc aacatgtccc cagggtgtct gac
333

```

<210> 1288

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1288

```

Met Leu His Gln Ser Phe Glu Glu Phe Arg Ser Ala Gln Cys Pro Ser
 1           5           10           15
Thr Leu Arg Leu Glu Leu Gly Trp Met Asn Ser Asp Gly Ser Gly Val
          20           25           30
Ser His Arg Asn Val Leu Lys Ser Arg Ile Phe Asn Gly Ser Asn Thr
          35           40           45
Pro Ser Gly Phe Leu Gly Pro Ser Leu Leu Val Val Pro Ser Ser His
          50           55           60
Leu Thr Ser Gly Leu Gln Ser Asn Trp Lys Ala Cys Pro Ala Pro Ala
65           70           75           80
Thr Leu Pro Val Ala Cys Leu Ser Ala Ser Ser Cys Thr Ser Leu His
          85           90           95
Leu Glu Leu Pro Leu Pro Phe Thr Arg

```

100

105

<210> 1289
 <211> 336
 <212> DNA
 <213> Homo sapiens

<400> 1289
 accgctgtct gtgtacaggt ggaaggggat gggatatgaga tggcgcagcg tgtgcatggg
 60
 cacggcgtat ggtgtgtgag tgcactcgtg tgccggagag ctgtaagctg ctggctgagt
 120
 cctgcacggg ggaggaggca aggtggcccc tgcctgtggg cacagagccc acctccggg
 180
 ccagcccgag gcccctttcc cagagcccc tcccaagggg ccataccacc tgcaccccca
 240
 agatggcgctg gggcgctccct ggtgcaggag caggggacag tcagggaggc gtgtggcgga
 300
 cagtagcagc cccccagccc cctccccccc accggt
 336

<210> 1290
 <211> 89
 <212> PRT
 <213> Homo sapiens

<400> 1290
 Met Val Cys Glu Cys Thr Arg Val Pro Glu Ser Cys Lys Leu Leu Ala
 1 5 10 15
 Glu Ser Cys Thr Val Glu Glu Ala Arg Trp Pro Leu Pro Val Gly Thr
 20 25 30
 Glu Pro Thr Phe Arg Ser Ser Pro Arg Pro Leu Ser Gln Ser Pro Leu
 35 40 45
 Pro Arg Gly His Thr Thr Cys Ile Pro Lys Met Ala Trp Gly Val Pro
 50 55 60
 Gly Ala Gly Ala Gly Asp Ser Gln Gly Gly Val Trp Arg Thr Val Ala
 65 70 75 80
 Ala Pro Gln Pro Pro Ser Pro His Arg
 85

<210> 1291
 <211> 379
 <212> DNA
 <213> Homo sapiens

<400> 1291
 tggccatcca cctctgtcag ctgttccggc aacccattca gatcattgtg gtagtaacga
 60
 atcttctgca acggcccggc accgtccacg cgagccagag gttgatagcc ttcacccca
 120
 taaacgtaca ggcttgtctg gctgtgttta tgctcctgca ataaccgcaa accatcccag
 180
 gtaaaccggg tttcccccaa cggataccca tcaactgcat gctcggtttt ttctatccga
 240

cgccccagcg ggcatatacac catcctgacc acgctaccat cgtcattacg cacttcaacc
 300
 agccggcttt cagcgtcata cgcaaaccgc tgcacgccac gcttggcact gcgcttctcg
 360
 accatccgcc caaacgcgt
 379

<210> 1292
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1292
 Met Val Glu Lys Arg Ser Ala Lys Arg Gly Val Gln Arg Phe Ala Tyr
 1 5 10 15
 Asp Ala Glu Ser Arg Leu Val Glu Val Arg Asn Asp Asp Gly Ser Val
 20 25 30
 Val Arg Met Val Tyr Asp Pro Leu Gly Arg Arg Ile Glu Lys Thr Glu
 35 40 45
 His Gly Ser Asp Gly Tyr Pro Leu Gly Glu Thr Arg Phe Thr Trp Asp
 50 55 60
 Gly Leu Arg Leu Leu Gln Glu His Lys His Ser Gln Thr Ser Leu Tyr
 65 70 75 80
 Val Tyr Glu Asp Glu Gly Tyr Gln Pro Leu Ala Arg Val Asp Gly Ala
 85 90 95
 Gly Pro Leu Gln Lys Ile Arg Tyr Tyr His Asn Asp Leu Asn Gly Leu
 100 105 110
 Pro Glu Gln Leu Thr Glu Val Asp Gly
 115 120

<210> 1293
 <211> 340
 <212> DNA
 <213> Homo sapiens

<400> 1293
 nngccggccg cccgagagct gttegaggcg tgccgcaacg gggacgtgga acgagtcaag
 60
 aggctgggtga cgcctgagaa ggtgaacagc cgcgacacgg cgggcaggaa atccaccccg
 120
 ctgcacttcg ccgcagggtt tgggcggaaa gacgtagttg aatatttgct tcagaatggt
 180
 gcaaagtgc aagcacgtga tgatgggggc cttattcctc ttcataatgc atgctctttt
 240
 ggtcatgctg aagtagtcaa tctccttttg cgacatggtg cagaccccaa tgcttgagat
 300
 aattggaatt atactcctag aggggtggagt gtgctcgga
 340

<210> 1294
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1294

```

Xaa Pro Ala Ala Arg Glu Leu Phe Glu Ala Cys Arg Asn Gly Asp Val
 1           5           10           15
Glu Arg Val Lys Arg Leu Val Thr Pro Glu Lys Val Asn Ser Arg Asp
 20           25           30
Thr Ala Gly Arg Lys Ser Thr Pro Leu His Phe Ala Ala Gly Phe Gly
 35           40           45
Arg Lys Asp Val Val Glu Tyr Leu Leu Gln Asn Gly Ala Asn Val Gln
 50           55           60
Ala Arg Asp Asp Gly Gly Leu Ile Pro Leu His Asn Ala Cys Ser Phe
 65           70           75           80
Gly His Ala Glu Val Val Asn Leu Leu Leu Arg His Gly Ala Asp Pro
 85           90           95
Asn Ala

```

<210> 1295

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1295

```

ggatcccgga gacctcgctg gcgaacgtca cctcgctccag ggccgaggcg cggaacaccg
60
acgtgtcgat gccctcgccc tcgatgcagt cggtcagcgg tacgacggcg ccgcgggagg
120
cgaaggtgcc gatctggctg cgctcggcgt agaccagcga cggcggttcg cccgacgcca
180
cggaggagag gaactgctgg atgtcgaggt caccctcgat cagcttgacc ttggcgctgc
240
cgagctcctc cttcgcccgg tcgagccgca ccgtcgcgat ctgctcgccg gcaccgaagc
300
ccatcacctc gacctcgccg gagagcttcg ccccgctgtc gaaagacgcg t
351

```

<210> 1296

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1296

```

Gly Ser Arg Arg Pro Arg Arg Arg Thr Ser Pro Arg Pro Gly Pro Arg
 1           5           10           15
Arg Gly Thr Pro Thr Cys Arg Cys Pro Arg Pro Arg Cys Ser Arg Ser
 20           25           30
Ala Val Arg Arg Arg Arg Gly Arg Arg Cys Arg Ser Gly Cys Ala
 35           40           45
Arg Arg Arg Pro Ala Thr Ala Val Arg Pro Thr Pro Arg Arg Arg Gly
 50           55           60
Thr Ala Gly Cys Arg Gly His Pro Arg Ser Ala
 65           70           75

```

<210> 1297

<211> 356

<212> DNA

<213> Homo sapiens

<400> 1297

gtgcacccgg attccattg ccaccgactt cgagtaaact ccagtcccgga ggacacgaga
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 gacacccagg cctcaggccc catgggcacg ctccacgcca cggctcctac cagagggaca
 120
 gatacactct acaaattctg gggccaccca caccaagaag acacggagga gccaaacaaa
 180
 gaaggaccat acgaaatgca ccccaaagc aaccaaccaa tccaagaaaa aatacgtctc
 240
 agggttctgt gggccctctt gcatgggctg ccctgcccc ctgttctggc ctggctcaag
 300
 caccttacc cagcctgctc gaaagagccc tggctaccag agcagagcac tggcct
 356

<210> 1298

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1298

Met	Gly	Thr	Leu	His	Ala	Thr	Ala	Pro	Thr	Arg	Gly	Thr	Asp	Thr	Leu
1				5				10					15		
Tyr	Lys	Ser	Arg	Gly	Pro	Pro	His	Gln	Glu	Asp	Thr	Glu	Glu	Pro	Thr
			20					25					30		
Lys	Glu	Gly	Pro	Tyr	Glu	Met	His	Pro	Gln	Ser	Asn	Gln	Pro	Ile	Gln
			35				40					45			
Glu	Lys	Ile	Arg	Leu	Arg	Val	Leu	Trp	Ala	Leu	Leu	His	Gly	Leu	Pro
	50					55				60					
Cys	Pro	Pro	Val	Leu	Ala	Trp	Leu	Lys	His	Leu	Thr	Pro	Ala	Cys	Ser
65				70						75				80	
Lys	Glu	Pro	Trp	Leu	Pro	Glu	Gln	Ser	Thr	Gly					
			85						90						

<210> 1299

<211> 307

<212> DNA

<213> Homo sapiens

<400> 1299

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 gttggtggca ggatgtctca gttccttgcc atgtgggtct ctacacaggg cagcttcctg
 120
 tgtctttgcc atatggcaac tgagaatgat cttggctacc ttctccagcc cgggagtcgg
 180
 gagttttctg ggggtggggtc acgggtcttg cccggagtgc gccctggcaa aggcctgtgc
 240
 cagtgatect ggagcggagc gaagtgttc cgtgactctg cagccgcagt tcttagggct
 300
 tccttag
 307

<210> 1300
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 1300
 Met Ala Ala Gly Leu Arg Leu Trp Trp Leu Leu Ala Gly Cys Leu Ser
 1 5 10 15
 Ser Leu Pro Cys Gly Ser Leu His Arg Ala Ala Ser Cys Val Phe Ala
 20 25 30
 Ile Trp Gln Leu Arg Met Ile Leu Ala Thr Phe Ser Ser Pro Gly Val
 35 40 45
 Gly Ser Phe Leu Gly Trp Gly His Gly Ser Cys Pro Glu Phe Ala Leu
 50 55 60
 Ala Lys Ala Cys Ala Ser Asp Pro Gly Ala Glu Arg Ser Val Ser Val
 65 70 75 80
 Thr Leu Gln Pro Gln Phe Leu Gly Leu Pro
 85 90

<210> 1301
 <211> 408
 <212> DNA
 <213> Homo sapiens

<400> 1301
 ctgagcaagt taaaagaagt tcttgaattt tataacttta ttttgacaaa ctattataaa
 60
 gttgagccta tttcctttga tgcagtatac gctgaagggt tggaaatggc tgagttcttg
 120
 cgccctatgg tgtcagatac gattacactt ttgcatgacc ttagaagggtc tggcgcaaac
 180
 atcatgtttg aaggcgcgca agggctctttg ttggatgttg atcatggtac ttaccogtat
 240
 gtgacttcat ctaatacgac tgcgggcgga gcgccagcgg gaacagggtt tggtcctttg
 300
 tacttagatt atgtattagg tatcactaag gcttatacga ctgcggttg tcttggacct
 360
 ttcctactg agttgtttga cgaagatggt gagcgtcttg gtacgcgt
 408

<210> 1302
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 1302
 Leu Ser Lys Leu Lys Glu Val Leu Glu Phe Tyr Asn Phe Ile Leu Thr
 1 5 10 15
 Asn Tyr Tyr Lys Val Glu Pro Ile Ser Phe Asp Ala Val Tyr Ala Glu
 20 25 30
 Gly Leu Glu Met Ala Glu Phe Leu Arg Pro Met Val Ser Asp Thr Ile
 35 40 45
 Thr Leu Leu His Asp Leu Arg Arg Ser Gly Ala Asn Ile Met Phe Glu

50	55	60
Gly Ala Gln Gly Ser Leu Leu Asp Val Asp His Gly Thr Tyr Pro Tyr		
65	70	75
Val Thr Ser Ser Asn Thr Thr Ala Gly Gly Ala Pro Ala Gly Thr Gly		80
	85	90
Phe Gly Pro Leu Tyr Leu Asp Tyr Val Leu Gly Ile Thr Lys Ala Tyr		95
	100	105
Thr Thr Arg Val Gly Ser Gly Pro Phe Pro Thr Glu Leu Phe Asp Glu		110
	115	120
Asp Gly Glu Arg Leu Gly Thr Arg		125
	130	135

<210> 1303

<211> 1037

<212> DNA

<213> Homo sapiens

<400> 1303

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gccggggggg ggatgctatc taacatcttc atgttcaacc cagagaagaa acatcccggc
60
gtttgccctg gggccctctc atccacatc attttttcaa cccttcccca ncctttcnga
120
aataggggcca accccttaaa aancaaatnt tcanataaac ccttttccct ccaccctttt
180
cccatcccat cctttttccc tcacaaacac aaacaaaang cctctttcct ttgccatttc
240
cactcctttt ggaagaaaca ggccctgttc cctccctgct caccacttca ccagctcag
300
ctggcacaaa aatactgcca ccacaccttc accctgccta gccaacctg gcagggcctc
360
ggagtagcct gccagctaaa atacgggttg ccagataac tgtgaatgtc agataagaat
420
cttctgggac aagtatgtcc catgccatat ttgggacata cttacactaa taaatttctg
480
tttatctgaa actcaaattt gcctggggcgt cctgtacttt tcttaactaa atttgggtgc
540
tctacacaca aggtccctgg ggtggggggg cacaggagca agccccctcc caggctgggt
600
ccctgccggc atctcccaca ggccaggact ggccaccag atggagcccg tgccaggcag
660
ccggcgacag acggacaaaag gctgctcagg agacactgca caccttcctc tttcttgtct
720
ggggggtcaa gaatccagac gccacactcc ccgagcgagc accaagacag gaagccaacc
780
tgcaatgccc agcccactgc gaccacaggg ctctgccggg gtcttgccgg aaccagggt
840
tccggtccag aagccaggga taaatgccgc ttctcctata gggacgggtca gagtagagag
900
ggggaggcct acagtctcac ctgcaggag aggaagtcct cggggcgggc acgtgggggg
960
cctgacagct ccgagcacac ccggccacag tgaccacgga ctgcacacgc agaagcagtc
1020
tggatcccac gcgtggc
1037

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<210> 1304
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1304
 Met Glu Pro Val Pro Gly Ser Arg Arg Gln Thr Asp Lys Gly Cys Ser
 1 5 10 15
 Gly Asp Thr Ala His Leu Pro Leu Ser Cys Leu Gly Ala Gln Glu Ser
 20 25 30
 Arg Arg Pro Pro Pro Arg Ala Ser Thr Lys Thr Gly Ser Gln Pro Ala
 35 40 45
 Met Pro Ser Pro Leu Arg Pro Gln Gly Ser Ala Gly Val Leu Pro Glu
 50 55 60
 Pro Arg Val Pro Val Gln Lys Pro Gly Ile Asn Ala Ala Ser Pro Ile
 65 70 75 80
 Gly Thr Val Arg Val Glu Arg Gly Arg Pro Thr Val Ser Pro Ala Gly
 85 90 95
 Arg Gly Ser Pro Arg Gly Gly His Val Gly Gly Leu Thr Ala Pro Ser
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 Thr Pro Gly His Ser Asp His Gly Leu His Thr Gln Lys Gln Ser Gly
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 Ser His Ala Trp
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<210> 1305
 <211> 775
 <212> DNA
 <213> Homo sapiens

<400> 1305
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<210> 1306
 <211> 258
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Asp Ala Asp Gly His Trp Val Ser Gly Thr Phe Asp Thr Ser Trp Glu
 50 55 60
 Arg Leu Asp Ala Ala Ala Met Gly Phe Asp Val Val Tyr Leu Pro
 65 70 75 80
 Ala Ile His Pro Met Gly Gln Ala Phe Arg Lys Gly Lys Asp Asn Thr
 85 90 95
 Leu Thr Pro Gly Pro Asp Asp Pro Gly Ser Pro Trp Ala Ile Gly Ser
 100 105 110
 Ser Asp Gly Gly His Asp Thr Ile His Pro Asp Leu Gly Thr Phe Asp
 115 120 125
 Asp Leu Asp Arg Phe Val Ala His Ala His Asp Leu Gly Met Glu Val
 130 135 140
 Ala Leu Asp Phe Ala Leu Gln Ala Ser Pro Asp His Pro Trp Val His
 145 150 155 160
 Gln His Pro Glu Trp Phe Thr Thr Arg Val Asp Gly Thr Ile Ala Tyr
 165 170 175
 Ala Glu Asn Ser Pro Lys Lys Tyr Gln Asp Ile Tyr Pro Ile Asn Phe
 180 185 190
 Asp Asn Asp Pro Asp Gly Ile Tyr Gln Glu Cys Leu Arg Leu Leu Glu
 195 200 205
 Leu Trp Ile Ser His Gly Val Thr Ile Phe Arg Val Asp Asn Pro His
 210 215 220
 Thr Lys Pro Leu Asn Phe Trp Ala Trp Leu Met Glu Gln Val His Arg
 225 230 235 240
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 Met Ile

<210> 1307
 <211> 624
 <212> DNA
 <213> Homo sapiens

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<210> 1308
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 1308
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 35 40 45
 Arg Gly Ala Leu Ala Ser Gly Cys Gly Thr Glu His Val Glu Trp Leu
 50 55 60
 Trp Ser Ser Thr Ala Gln Ala Gln Gly Pro Asp Arg Met Cys Pro Ala
 65 70 75 80
 Ser Leu Thr Ser Pro Glu Val Gly Cys Arg Glu Pro Gly Ala Trp His
 85 90 95
 Ser Pro Pro Ala
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<210> 1309
 <211> 563
 <212> DNA
 <213> Homo sapiens

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atgtccacca ccacccacac cttgcagcat aaagacacat cgatctgggt atttgccgaa
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 420
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<210> 1310
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<400> 1310
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 Trp Val Pro Leu Phe Gly Gln Leu Phe Trp Leu Ala Gly Asn Val Leu
 35 40 45
 Ile Asp Arg Gly Asn Ala His Lys Ala Arg Arg Ser Met Leu Thr Thr
 50 55 60
 Thr His Thr Leu Gln His Lys Asp Thr Ser Ile Trp Val Phe Ala Glu
 65 70 75 80
 Gly Thr Arg Asn Phe Gly Glu Thr Leu Leu Pro Phe Lys Lys Gly Ala
 85 90 95
 Phe Gln Met Ala Ile Ala Ala Gly Val Pro Ile Val Gln Val Cys Val
 100 105 110
 Ser Thr Tyr Val Lys His Met Lys Leu Asn Arg Trp Asp Ser Gly Asp
 115 120 125
 Ile Leu Ile Arg Ser Leu Pro Pro Ile Pro Thr Thr Gly Leu Thr Leu
 130 135 140
 Asp Asp Met Pro Arg Leu Met Glu Thr Cys Arg Gln Gln Met Arg Glu
 145 150 155 160
 Cys Ile Glu Ala Met Asp Arg Glu Leu Glu Ile Val Pro Cys Arg Asn
 165 170 175
 Glu Leu Ala Arg Glu Gly Arg
 180

<210> 1311
 <211> 674
 <212> DNA
 <213> Homo sapiens

<400> 1311
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<210> 1312

<211> 196

<212> PRT

<213> Homo sapiens

<400> 1312

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Gln	Asp	Pro	Ala	Cys	Glu	Pro	His	Arg	Asp	Asn	Arg	Gly	Asp	His	Pro	45
			35				40									
Ala	Tyr	Gln	Gly	Gly	Gln	His	Cys	Gly	Ser	His	Leu	His	Lys	Asp	Asp	60
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Leu	Val	His	Pro	Thr	Pro	Ala	Gln	Ser	Asp	Ala	Phe	Glu	Ala	Gly	His	80
					70					75						
Gln	Ile	Thr	Val	Gly	Gly	Ser	Leu	Leu	Leu	Arg	Gln	Gln	Ala	Arg	His	95
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Asp	Gly	Arg	Gln	His	Asp	Glu	Gly	Asp	Gly	Arg	Asp	Asp	Gly	Asp	Arg	110
			100					105								
Trp	Gln	Arg	Asp	Ile	Thr	Glu	Asp	Ser	Gly	Gly	His	Asp	Ile	Lys	Phe	125
			115				120									
Pro	Gln	Pro	Val	Arg	Leu	Arg	Pro	Leu	Val	Gly	Gln	Ser	Ile	Leu	Ile	140
					135											
Gly	Gly	Gln	Pro	Cys	Glu	Gln	Asn	Arg	Arg	Ser	Ser	Ala	Ser	Trp	Tyr	160
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Ser	Gly	Phe	Arg	Arg	Pro	Gly	Asp	Ala	Leu	Asp	Pro	Ala	Gln	Ile	Ile	175
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Arg	Gln	Pro	Asp	Gly	Val	Cys	Arg	Val	Gly	Pro	Gly	Gly	Ile	Ile	Gly	190
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<210> 1313
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 <213> Homo sapiens

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 240
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 360
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 367

<210> 1314
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1314
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 Lys Phe Ser Val Ser Lys Thr Gly Leu Ser Thr Cys Pro Ala Asn Leu
 35 40 45
 Ser Ser Ser Arg Ala Pro Leu Leu Ala Lys Thr Pro Leu Ser Thr Ser
 50 55 60
 Tyr Thr His Gln Lys Pro Arg Ser His Thr Arg Leu Cys Pro Leu Pro
 65 70 75 80
 Ser Leu Pro Pro Pro Ser Ile Leu Ser Pro Lys Ser Arg Asp Cys Pro
 85 90 95
 Thr Leu Ala Ala Thr Thr Ala Ala Ala Pro Ala Ala Pro Pro Ala Pro
 100 105 110
 Ala Thr Trp Arg Gly Cys Met Asp Ile
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<210> 1315
 <211> 5245
 <212> DNA
 <213> Homo sapiens

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 <211> 856
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Lys Ser Gln Pro Gly Ser Ser Ala Ser Ser Ser Ser Gly Val Lys Met
 50 55 60
 Thr Ser Phe Ala Glu Gln Lys Phe Arg Lys Leu Asn His Thr Asp Gly
 65 70 75 80
 Lys Ser Ser Gly Ser Ser Ser Gln Lys Thr Thr Pro Glu Gly Ser Glu
 85 90 95
 Leu Asn Ile Pro His Val Val Ala Trp Ala Gln Ile Pro Glu Glu Thr
 100 105 110
 Gly Leu Pro Gln Gly Arg Asp Thr Thr Gln Leu Leu Ala Ser Glu Met
 115 120 125
 Val His Leu Arg Met Lys Leu Glu Glu Lys Arg Arg Ala Ile Glu Ala
 130 135 140
 Gln Lys Lys Lys Met Glu Ala Ala Phe Thr Lys Gln Arg Gln Lys Met
 145 150 155 160
 Gly Arg Thr Ala Phe Leu Thr Val Val Lys Lys Lys Gly Asp Gly Ile
 165 170 175
 Ser Pro Leu Arg Glu Glu Ala Ala Gly Ala Glu Asp Glu Lys Val Tyr
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 Thr Asp Arg Ala Lys Glu Lys Glu Ser Gln Lys Thr Asp Gly Gln Arg
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 Ser Lys Ser Leu Ala Asp Ile Lys Glu Ser Met Glu Asn Pro Gln Ala
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 Lys Trp Leu Lys Ser Pro Thr Thr Pro Ile Asp Pro Glu Lys Gln Trp
 225 230 235 240
 Asn Leu Ala Ser Pro Ser Glu Glu Thr Leu Asn Glu Gly Glu Ile Leu
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 Glu Tyr Thr Lys Ser Ile Glu Lys Leu Asn Ser Ser Leu His Phe Leu
 260 265 270
 Gln Gln Glu Met Gln Arg Leu Ser Leu Gln Gln Glu Met Leu Met Gln

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Ser Ala Ile Ala Pro Phe Ser Ser Asp Ser Pro Arg Pro Thr His Pro
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Ser Pro Gln Ser Ser Asn Arg Lys Ser Ala Ser Phe Ser Val Lys Ser
      340      345      350
Gln Arg Thr Pro Arg Pro Asn Glu Leu Lys Ile Thr Pro Leu Asn Arg
      355      360      365
Thr Leu Thr Pro Pro Arg Ser Val Asp Ser Leu Pro Arg Leu Arg Arg
      370      375      380
Phe Ser Pro Ser Gln Val Pro Ile Gln Thr Arg Ser Phe Val Cys Phe
385      390      395      400
Gly Asp Asp Gly Glu Pro Gln Leu Lys Glu Ser Lys Pro Lys Glu Glu
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Val Lys Lys Glu Glu Leu Glu Ser Lys Gly Thr Leu Glu Gln Arg Gly
      420      425      430
His Asn Pro Glu Glu Lys Glu Ile Lys Pro Phe Glu Ser Thr Val Ser
      435      440      445
Glu Val Leu Ser Leu Pro Val Thr Glu Thr Val Cys Leu Thr Pro Asn
      450      455      460
Glu Asp Gln Leu Asn Gln Pro Thr Glu Pro Pro Lys Pro Val Phe
465      470      475      480
Pro Pro Thr Ala Pro Lys Asn Val Asn Leu Ile Glu Val Ser Leu Ser
      485      490      495
Asp Leu Lys Pro Pro Glu Lys Ala Asp Val Pro Val Glu Lys Tyr Asp
      500      505      510
Gly Glu Ser Asp Lys Glu Gln Phe Asp Asp Asp Gln Lys Val Cys Cys
      515      520      525
Gly Phe Phe Phe Lys Asp Asp Gln Lys Ala Glu Asn Asp Met Ala Met
      530      535      540
Lys Arg Ala Ala Leu Leu Glu Lys Arg Leu Arg Arg Glu Lys Glu Thr
545      550      555      560
Gln Leu Arg Lys Gln Gln Leu Glu Ala Glu Met Glu His Lys Lys Glu
      565      570      575
Glu Thr Arg Arg Lys Thr Glu Glu Glu Arg Gln Lys Lys Glu Asp Glu
      580      585      590
Arg Ala Arg Arg Glu Phe Ile Arg Gln Glu Tyr Met Arg Arg Lys Gln
      595      600      605
Leu Lys Leu Met Glu Asp Met Asp Thr Val Ile Lys Pro Arg Pro Gln
      610      615      620
Val Val Lys Gln Lys Lys Gln Arg Pro Lys Ser Ile His Arg Asp His
625      630      635      640
Ile Glu Ser Pro Lys Thr Pro Ile Lys Gly Pro Pro Val Ser Ser Leu
      645      650      655
Ser Leu Ala Ser Leu Asn Thr Gly Asp Asn Glu Ser Val His Ser Gly
      660      665      670
Lys Arg Thr Pro Arg Ser Glu Ser Val Glu Gly Phe Leu Ser Pro Ser
      675      680      685
Arg Cys Gly Ser Arg Asn Gly Glu Lys Asp Trp Glu Asn Ala Ser Thr
      690      695      700
Thr Ser Ser Val Ala Ser Gly Thr Glu Tyr Thr Gly Pro Lys Leu Tyr

```

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705              710              715              720
Lys Glu Pro Ser Ala Lys Ser Asn Lys His Ile Ile Gln Asn Ala Leu
              725              730              735
Ala His Cys Cys Leu Ala Gly Lys Val Asn Glu Gly Gln Lys Lys Lys
              740              745              750
Ile Leu Glu Glu Met Glu Lys Ser Asp Ala Asn Asn Phe Leu Ile Leu
              755              760              765
Phe Arg Asp Ser Gly Cys Gln Phe Arg Ser Leu Tyr Thr Tyr Cys Pro
              770              775              780
Glu Thr Glu Glu Ile Asn Lys Leu Thr Gly Ile Gly Pro Lys Ser Ile
785              790              795              800
Thr Lys Lys Met Ile Glu Gly Leu Tyr Lys Tyr Asn Ser Asp Arg Lys
              805              810              815
Gln Phe Ser His Ile Pro Ala Lys Thr Leu Ser Ala Ser Val Asp Ala
              820              825              830
Ile Thr Ile His Ser His Leu Trp Gln Thr Lys Arg Pro Val Thr Pro
              835              840              845
Lys Lys Leu Leu Pro Thr Lys Ala
              850              855

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<210> 1317

<211> 1123

<212> DNA

<213> Homo sapiens

<400> 1317

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nccggccgagg gcattcacct caacatggca gcaggcagcg gtgtccccgg cagtggactg
60
ggcgaggagg tgccctgtgc catgatggag ggtgtggcag cctacacca gacagagccc
120
gagggtagcc agcctagcac catggacgcc accgcagtag caggcatcga gaccaagaaa
180
gagaaggagg acctgtgctt gctaaagaag gaggagaagg aggagccagt agccccggag
240
ctggcaacaa cgggtgcctga gagcgagag cctgaggcag aggcggacgg ggaggagctg
300
gacggcagcg acatgtcagc catcatctat gaaatcccca aggagcctga gaagaggcgg
360
cggagcaagc ggtcgcggt gatggatgct gacggcctgc tcgagatgtt cactgcccc
420
tacgagggt gcagccaagt ctacgtggcc ctcagcagct tccagaacca cgtcaatctt
480
gtgcatcgga aaggaaagac caaagtgtgc cctcatcctg gctgtggcaa gaagttctat
540
ttatccaacc acctgcggcg gcacatgac atccattcag gtgtccgtga attcacctgc
600
gagacctgag gcaagtcctt caagaggaag aaccacctgg aggtacatcg gcgcacccac
660
accggcgaga cccccctga gtgcgtgatc tgtggctacc agtgccggca gcgcgcgtcg
720
ctcaactggc acatgaagaa gcacactgag gaggtgcagt acaacttcac gtgcgatgcc
780
tgcggaagc gcttcgagaa gctggacagc gtcaagttcc acacgtcaa aagccacccg
840

```

gatcacaagc ccacctgacc cacctgacca ctgaccgccc ctattttattc gtccgctcgg
 900
 acaccacagc cccgggttgc cggggcctgg acagctgcga gggccggccg gaccgcgggc
 960
 cggaaggagc gccccgccc cgccccagag ctggcgcccc tgggcaggtt ccccccccg
 1020
 ccccaccgca tccttctcgg agctggtgcc tggggctgca ttgctggaac tgtgtcaaga
 1080
 gagcagagtg agattaaaga gcgagaaagg aaaaaaaaaa aaa
 1123

<210> 1318
 <211> 285
 <212> PRT
 <213> Homo sapiens

<400> 1318
 Xaa Ala Glu Gly Ile His Leu Asn Met Ala Ala Gly Ser Gly Val Pro
 1 5 10 15
 Gly Ser Gly Leu Gly Glu Glu Val Pro Cys Ala Met Met Glu Gly Val
 20 25 30
 Ala Ala Tyr Thr Gln Thr Glu Pro Glu Gly Ser Gln Pro Ser Thr Met
 35 40 45
 Asp Ala Thr Ala Val Ala Gly Ile Glu Thr Lys Lys Glu Lys Glu Asp
 50 55 60
 Leu Cys Leu Leu Lys Lys Glu Glu Lys Glu Glu Pro Val Ala Pro Glu
 65 70 75 80
 Leu Ala Thr Thr Val Pro Glu Ser Ala Glu Pro Glu Ala Glu Ala Asp
 85 90 95
 Gly Glu Glu Leu Asp Gly Ser Asp Met Ser Ala Ile Ile Tyr Glu Ile
 100 105 110
 Pro Lys Glu Pro Glu Lys Arg Arg Arg Ser Lys Arg Ser Arg Val Met
 115 120 125
 Asp Ala Asp Gly Leu Leu Glu Met Phe His Cys Pro Tyr Glu Gly Cys
 130 135 140
 Ser Gln Val Tyr Val Ala Leu Ser Ser Phe Gln Asn His Val Asn Leu
 145 150 155 160
 Val His Arg Lys Gly Lys Thr Lys Val Cys Pro His Pro Gly Cys Gly
 165 170 175
 Lys Lys Phe Tyr Leu Ser Asn His Leu Arg Arg His Met Ile Ile His
 180 185 190
 Ser Gly Val Arg Glu Phe Thr Cys Glu Thr Cys Gly Lys Ser Phe Lys
 195 200 205
 Arg Lys Asn His Leu Glu Val His Arg Arg Thr His Thr Gly Glu Thr
 210 215 220
 Pro Leu Gln Cys Val Ile Cys Gly Tyr Gln Cys Arg Gln Arg Ala Ser
 225 230 235 240
 Leu Asn Trp His Met Lys Lys His Thr Ala Glu Val Gln Tyr Asn Phe
 245 250 255
 Thr Cys Asp Ala Cys Gly Lys Arg Phe Glu Lys Leu Asp Ser Val Lys
 260 265 270
 Phe His Thr Leu Lys Ser His Pro Asp His Lys Pro Thr
 275 280 285

<210> 1319
 <211> 538
 <212> DNA
 <213> Homo sapiens

<400> 1319
 cgggagcgga gcccagctct tggctggtga tgagggcctg gaagcagatg gcctctcagt
 60
 cctccatttg ggaggactcc caaaatagtg caggctcgag ggggtgggga atggctcctg
 120
 ctgaatgtgt gaatgggtcc ctgggtgctt tccttcctct gggagctccg tgggagagtg
 180
 gagtcgatgc caagtcagag agcagttggg gaggaacca gaagccctgg gatggtgtct
 240
 gcatgggaat gtgtaggag gcagccacaa tgggcctggg ccttccttct tctccttct
 300
 gtccccctcc cccatcccc tctctcctcc cttccttctg gaaaccctg actgggggaa
 360
 acacacacag gtgggatgca ggtatccggg aagctcatag aagctgccac gctgctggag
 420
 ttgctctcat acaggagcgt gggcatgccc cgcgtggagt tgtgctgtgt gtgtgcatat
 480
 gtatggttgt gtgtgcatgg ggggtgggga ttctgacctg gggtcactcc caaagctt
 538

<210> 1320
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 1320
 Met Arg Ala Trp Lys Gln Met Ala Ser Gln Ser Ser Ile Trp Glu Asp
 1 5 10 15
 Ser Gln Asn Ser Ala Gly Ser Arg Gly Trp Gly Met Ala Pro Ala Glu
 20 25 30
 Cys Val Asn Gly Ser Leu Gly Ala Phe Leu Pro Leu Gly Ala Pro Trp
 35 40 45
 Glu Ser Gly Val Asp Ala Lys Ser Glu Ser Ser Trp Gly Gly Thr Gln
 50 55 60
 Lys Pro Trp Asp Gly Val Cys Met Gly Met Cys Arg Glu Ala Ala Thr
 65 70 75 80
 Met Gly Leu Gly Leu Pro Phe Ser Pro Ser Cys Pro Pro Pro Pro Ser
 85 90 95
 Pro Ser Leu Leu Pro Ser Phe Trp Lys Pro Ser Thr Gly Gly Asn Thr
 100 105 110
 His Arg Trp Asp Ala Gly Ile Arg Glu Ala His Arg Ser Cys His Ala
 115 120 125
 Ala Gly Val Cys Leu Ile Gln Glu Arg Gly His Ala Pro Arg Gly Val
 130 135 140
 Val Leu Cys Val Cys Ile Cys Met Val Val Cys Ala Trp Gly Trp Gly
 145 150 155 160
 Ile Leu Thr Trp Gly His Ser Gln Ser
 165

<210> 1321
<211> 1292
<212> DNA
<213> Homo sapiens

<400> 1321
nacgcgtacc gtcgctgata tcccccgtagg tcgtgaccaa cgcggccggg ttcaccatct
60
cggaacgcag caatgatccg gcgtcagtagc tctcagtcac cgcaggatga cccgggtgcaa
120
cgcccgtagc gctcacggta cgcaacgacg aagcagggat cgctcagacc cgggacagtc
180
atcgtcaaga agatttataa caacaatgtc cttctcggcg tcaacgggtc ggggaccgaa
240
atggctcgtca atgctcgcgg tatgcctac ggacgacacc gcggggagat cgtcagatgcc
300
tcgtcggccc agcgatatgt cgcagagggt gcctatcgca cgaccgccat cgcatactg
360
ctaacgaacg ccaactcacac cgagggtgca gtggcacagg caatcgtcga attggcgcg
420
gaagagctgg gcaactccca tgcccgacgg atgatgctgc ccatcctcga tcacctcgtc
480
gcagctgtgc accgagctaa gcagggggcc gtcatacatt tccccctgga atgggaagtc
540
cgtcagctct atcccgatga ggcggaactg ggccgacgag ctgtcgaaat cgtcagcgg
600
gctctcgaaa tccatttgca acccgaggaa tgggtggcat tctccctgca cttcatcaat
660
cagcgggtgg acagtagaga cgtttcgcgg accatgtcga tgactcagac gatctgcgac
720
gttttcaccg agctggagga cctgtggcac gttgagatcg accgttcgtc catgagcgca
780
tcccgcttcg taccacacct tcgctatctg ttcgctcggg cctcggacaa caagcagctc
840
tctcacgttg acctggacat tgtgggactc atgtcagatc gctaccaga agccacattg
900
gcagctagcc aagtggccga gcacatatcg aaagcaatcg gcaacgacct gacggaagcc
960
gaaatcaact acatcgctt acacaccacc cggctctaca acgaggatgat ggggatggat
1020
gactgacgat cgcgcacctg ttaaggctca tcggtagtgg gcaatacaca aaatggcgat
1080
gaccttcctg ccggaaagcc agcaccaaaag taccagat caaaattcag atgcgtgcct
1140
aattcccacc ccgacatcca agaggtcagg ggggggttgt tgggggtggt ggggtgggggt
1200
gggggggttt gcatgctcag ggggtgggggc tttgttgaag ccatcatgaa gttgcaaacc
1260
caggactgtt ccactagtaa agccctgcc tt
1292

<210> 1322
<211> 317
<212> PRT

<213> Homo sapiens

<400> 1322

```

Met Ile Arg Arg Gln Cys Ser Gln Ser Pro Gln Asp Asp Pro Val Gln
 1           5           10           15
Arg Pro Asp Arg Ser Arg Tyr Ala Thr Thr Lys Gln Gly Ser Leu Arg
      20           25           30
Pro Gly His Val Ile Val Lys Lys Ile Tyr Asn Asn Asn Val Leu Leu
      35           40           45
Gly Val Asn Gly Ser Gly Thr Glu Met Val Val Asn Ala Arg Gly Ile
 50           55           60
Ala Tyr Gly Arg His Arg Gly Glu Ile Val Asp Ala Ser Ser Ala Gln
65           70           75           80
Arg Tyr Val Ala Glu Gly Ala Tyr Arg Thr Thr Ala Ile Ala Ser Leu
      85           90           95
Leu Thr Asn Ala Thr His Thr Glu Val Arg Val Ala Gln Ala Ile Val
      100          105          110
Glu Leu Ala Arg Glu Glu Leu Gly Thr Pro His Ala Arg Arg Met Met
      115          120          125
Leu Pro Ile Leu Asp His Leu Val Ala Ala Val His Arg Ala Lys Gln
      130          135          140
Gly Ala Val Ile Asp Phe Pro Leu Glu Trp Glu Val Arg Gln Leu Tyr
145          150          155          160
Pro Asp Glu Ala Glu Leu Gly Arg Arg Ala Val Glu Ile Val Asp Gly
      165          170          175
Ala Leu Glu Ile His Leu Gln Pro Glu Glu Trp Val Ala Phe Ser Leu
      180          185          190
His Phe Ile Asn Gln Arg Trp Asp Ser Arg Asp Val Ser Arg Thr Met
      195          200          205
Ser Met Thr Gln Thr Ile Cys Asp Val Phe Thr Glu Leu Glu Asp Leu
      210          215          220
Trp His Val Glu Ile Asp Arg Ser Ser Met Ser Ala Ser Arg Phe Val
225          230          235          240
Thr His Leu Arg Tyr Leu Phe Ala Arg Ala Ser Asp Asn Lys Gln Leu
      245          250          255
Ser His Val Asp Leu Asp Ile Val Gly Leu Met Ser Asp Arg Tyr Pro
      260          265          270
Glu Ala Thr Leu Ala Ala Ser Gln Val Ala Glu His Ile Ser Lys Ala
      275          280          285
Ile Gly Asn Asp Leu Thr Glu Ala Glu Ile Asn Tyr Ile Ala Leu His
      290          295          300
Thr Thr Arg Leu Tyr Asn Glu Val Met Gly Met Asp Asp
305          310          315

```

<210> 1323

<211> 306

<212> DNA

<213> Homo sapiens

<400> 1323

```

cgcgtgatgg gaatgcgtca ctatgatgtt cagttgattg gtggtatcac tctgcacgaa
60
ggcaaaattg ctgagatgcg tacaggtgaa ggtaaaaccc tgatgggtac tttagcgtgt
120

```

tacctcaatg cattgagtgg tcagggtgtg catgtcatca ccgtaaatga ctatcttgca
 180
 caacgtgatg ctgaactcaa ccgcccatta tttgagtttt tgggtttaag catcgggtgtg
 240
 atttattcga tgcaaatgcc tgctgagaaa gcacaagctt atttagcaga cattaacttac
 300
 ggtacc
 306

<210> 1324
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1324
 Arg Val Met Gly Met Arg His Tyr Asp Val Gln Leu Ile Gly Gly Ile
 1 5 10 15
 Thr Leu His Glu Gly Lys Ile Ala Glu Met Arg Thr Gly Glu Gly Lys
 20 25 30
 Thr Leu Met Gly Thr Leu Ala Cys Tyr Leu Asn Ala Leu Ser Gly Gln
 35 40 45
 Gly Val His Val Ile Thr Val Asn Asp Tyr Leu Ala Gln Arg Asp Ala
 50 55 60
 Glu Leu Asn Arg Pro Leu Phe Glu Phe Leu Gly Leu Ser Ile Gly Val
 65 70 75 80
 Ile Tyr Ser Met Gln Met Pro Ala Glu Lys Ala Gln Ala Tyr Leu Ala
 85 90 95
 Asp Ile Thr Tyr Gly Thr
 100

<210> 1325
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 1325
 gtgcacatgg gccactggc gaatccgacg cggggcctac ggcgcgcaat actggcgggc
 60
 attgtcgccg catgttcgt ctccgctcat gccggaagct ggccagagaa accgatcacg
 120
 atggtcgtgc cgtttccgc cggaggcggc accgatctcg tggcgcgctc gatccagccg
 180
 cttttgcagc gcgaactcgg acaaccgggtg gtgatcgaca accgcagcgg cgcaggcggc
 240
 acgctcggct ccagcttcgt ggcgcgggcc gttgccgacg gctacacggc tggcgtggtc
 300
 accacgagca cccacgcggt aagcgtcgcg ctctatcccc ggctggccta caaccgaca
 360
 gcggactttg catacgccgg cttcatcggc n
 391

<210> 1326
 <211> 130
 <212> PRT

<213> Homo sapiens

<400> 1326

```

Val His Met Gly Pro Leu Ala Asn Pro Thr Arg Gly Leu Arg Arg Ala
 1           5           10           15
Ile Leu Ala Ala Ile Val Ala Ala Cys Ser Val Ser Ala His Ala Gly
          20           25           30
Ser Trp Pro Glu Lys Pro Ile Thr Met Val Val Pro Phe Pro Ala Gly
          35           40           45
Gly Gly Thr Asp Leu Val Ala Arg Ser Ile Gln Pro Leu Leu Gln Arg
          50           55           60
Glu Leu Gly Gln Pro Val Val Ile Asp Asn Arg Ser Gly Ala Gly Gly
65           70           75           80
Thr Leu Gly Ser Ser Phe Val Ala Arg Ala Val Ala Asp Gly Tyr Thr
          85           90           95
Ala Gly Val Val Thr Thr Ser Thr His Ala Val Ser Val Ala Leu Tyr
          100          105          110
Pro Arg Leu Ala Tyr Asn Pro Thr Ala Asp Phe Ala Tyr Ala Gly Phe
          115          120          125
Ile Gly
          130

```

<210> 1327

<211> 324

<212> DNA

<213> Homo sapiens

<400> 1327

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nnacgcgtga ttctcggaact gcagcagttc gagcagtcgc atggacagag cgacgggagc
60
tactggctat ggttcgagct gctgtggcga gactatttcc gctttctgca tcttcggcat
120
ggcgctcggc tgtaccgcgc acgcggcctc gcaaatgagg tacggcacgc ggagcgccca
180
gatgtgcagg gcttcgagcg ctggcgctcg gcatcgaccg gcgagccgct cgtcgatgcc
240
gcgatgcgcg agctggagac caccggctac ctcagcaaca ggctcagaca ggtggtcgcg
300
agctacctcg tgcacgagct ggga
324

```

<210> 1328

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1328

```

Xaa Arg Val Ile Ser Glu Leu Gln Gln Phe Glu Gln Ser His Gly Gln
 1           5           10           15
Ser Asp Gly Ser Tyr Trp Leu Trp Phe Glu Leu Leu Trp Arg Asp Tyr
          20           25           30
Phe Arg Phe Leu His Leu Arg His Gly Ala Arg Leu Tyr Arg Ala Arg
          35           40           45
Gly Leu Ala Asn Glu Val Arg His Ala Glu Arg Pro Asp Val Gln Gly

```

```

          50          55          60
Phe Glu Arg Trp Arg Arg Ala Ser Thr Gly Glu Pro Leu Val Asp Ala
65          70          75          80
Ala Met Arg Glu Leu Glu Thr Thr Gly Tyr Leu Ser Asn Arg Leu Arg
          85          90          95
Gln Val Val Ala Ser Tyr Leu Val His Glu Leu Gly
          100          105

```

<210> 1329
 <211> 438
 <212> DNA
 <213> Homo sapiens

```

<400> 1329
ngtgcacgct tagcattaga tttagcttcc agtggcaaaa ctacgtcggt gattttcaagc
60
ggcgatatcg gcatttacgc gatggcgacc ctggtgtttg aactgctgga tagacaactc
120
cagggccttg aagaccatcc tgaatgggta gatgttgaaa tcgatgtggt acctggcatc
180
tctgcaatgc aagctgggtgc aagtcgtatt ggtgcatgt taggtcatga cttttgtacg
240
gtgagtttgt ctgatttatt aacccttgg gaaactatta ataaacgtat tcatagtga
300
ggtgaggggg attttgttat ctctttttat aaccctgttt ctaagaaacg tgattggcag
360
cttaaccacg cgcgtgatgt attattgaaa taccgtccag catcaacgcc agttttatta
420
ggtcgtcagt tgacgcgt
438

```

<210> 1330
 <211> 146
 <212> PRT
 <213> Homo sapiens

```

<400> 1330
Xaa Ala Arg Leu Ala Leu Asp Leu Ala Ser Ser Gly Lys Thr Thr Ser
1          5          10          15
Leu Ile Ser Ser Gly Asp Ile Gly Ile Tyr Ala Met Ala Thr Leu Val
          20          25          30
Phe Glu Leu Leu Asp Arg Gln Leu Gln Gly Leu Glu Asp His Pro Glu
          35          40          45
Trp Leu Asp Val Glu Ile Asp Val Val Pro Gly Ile Ser Ala Met Gln
          50          55          60
Ala Gly Ala Ser Arg Ile Gly Ala Met Leu Gly His Asp Phe Cys Thr
65          70          75          80
Val Ser Leu Ser Asp Leu Leu Thr Pro Trp Glu Thr Ile Asn Lys Arg
          85          90          95
Ile His Ser Ala Gly Glu Gly Asp Phe Val Ile Ser Phe Tyr Asn Pro
          100          105          110
Val Ser Lys Lys Arg Asp Trp Gln Leu Asn His Ala Arg Asp Val Leu
          115          120          125
Leu Lys Tyr Arg Pro Ala Ser Thr Pro Val Leu Leu Gly Arg Gln Leu

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130 135 140
 Thr Arg
 145

 <210> 1331
 <211> 453
 <212> DNA
 <213> Homo sapiens

 <400> 1331
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 60
 catcttcttg ccggcatcgg acgcatcgaa tccggtcacg ccaacggcgg caagacgacc
 120
 tcgggtgggta cgaacgtcac cccgatcctc ggccccatcc tcgacggacg gctggcaggg
 180
 aacgaagtca ttcgggacac cgacaagggc aatcgacggc gaccactca cgaccgcgcc
 240
 gtccggccga tgcagttcat tccggccacc tgggccggat atgccagcga cggcaacggg
 300
 gacggaatca aggaccccaa caacgtcttc gatgcggcac tctcggcagc gaagtacctc
 360
 tgcagcggcg gactcaacct gcgcgatgtc gcccaggaga ccaaagctgt tctgcgatac
 420
 aacaactcgg ccgcttacgc agcaaacgtg atc
 453

 <210> 1332
 <211> 151
 <212> PRT
 <213> Homo sapiens

 <400> 1332
 Ala Tyr Arg Ser Ala Glu Leu Val Met Met Thr Glu Ala Pro Gly Cys
 1 5 10 15
 Gly Ile Pro Trp His Leu Leu Ala Gly Ile Gly Arg Ile Glu Ser Gly
 20 25 30
 His Ala Asn Gly Gly Lys Thr Thr Ser Val Gly Thr Asn Val Thr Pro
 35 40 45
 Ile Leu Gly Pro Ile Leu Asp Gly Arg Leu Ala Gly Asn Glu Val Ile
 50 55 60
 Arg Asp Thr Asp Lys Gly Asn Arg Arg Arg Pro Thr His Asp Arg Ala
 65 70 75 80
 Val Gly Pro Met Gln Phe Ile Pro Ala Thr Trp Ala Gly Tyr Ala Ser
 85 90 95
 Asp Gly Asn Gly Asp Gly Ile Lys Asp Pro Asn Asn Val Phe Asp Ala
 100 105 110
 Ala Leu Ser Ala Ala Lys Tyr Leu Cys Ser Gly Gly Leu Asn Leu Arg
 115 120 125
 Asp Val Ala Gln Glu Thr Lys Ala Val Leu Arg Tyr Asn Asn Ser Ala
 130 135 140
 Ala Tyr Ala Ala Asn Val Ile
 145 150

<210> 1333
 <211> 540
 <212> DNA
 <213> Homo sapiens

<400> 1333
 acgcgtcgcc cacactgttg ccgccgaggc ggctcgagcc ggggtgtgagg aaggatccgc
 60
 ggcacagctc gtcgggtcaag atgggtctag tgctgctcgt atggcggcgg aggcattccgc
 120
 gcgaagggct aaagcggatg gactaagcca gcttgctatc gatgtcaatg gagacgccgt
 180
 cagcgtcgcg acggaaatca cccggcctac tcgtctatta gcccttattg gactaaccga
 240
 agtacacggg cgggcgagcg aaatgtgtat ttgtctggct cgctgaggcc gttgcagcga
 300
 tacaatgatg aggtgtctaa gtattttccg gtccaccgga agaaccgca gcagcgttct
 360
 ctcaatcaga tcgtcgacat cctgcacat ggcggtctta tcgctaccc gacagacacg
 420
 gggtatgcct tcggtgcccg gntagggat aaggatgccg tggaccggat tcgcaaactt
 480
 cgccagttat ttgacaagca tcacttcacc ctggtcatga gccagtttgc gcaggttggc
 540

<210> 1334
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 1334
 Val His Pro Glu Asn Pro Gln Gln Arg Ser Leu Asn Gln Ile Val Asp
 1 5 10 15
 Ile Leu His His Gly Gly Leu Ile Ala Tyr Pro Thr Asp Thr Gly Tyr
 20 25 30
 Ala Phe Gly Ala Arg Xaa Gly Asn Lys Asp Ala Val Asp Arg Ile Arg
 35 40 45
 Lys Leu Arg Gln Leu Phe Asp Lys His His Phe Thr Leu Val Met Ser
 50 55 60
 Gln Phe Ala Gln Val Gly
 65 70

<210> 1335
 <211> 748
 <212> DNA
 <213> Homo sapiens

<400> 1335
 nctctcatac tttttttccc tattcctatc cccctctct cgcaccgcgt gaagcgttct
 60
 gtgaatgccca agaagaagcg tcgtgaggtc ctcgatcagg cctccgggta ccgtgggtcag
 120
 cgctcgcgcc tgtaccgcaa ggccaaggag cagaccctcc attcggccac ttattcggtc
 180

cgtgaccgtc gtgctaagaa gggtgacttc cgctcgctgt ggatccagcg catcaatgct
 240
 gcttcccgtg cccagggcat gacctacaac cgtttcatca acggtctgaa gaacgctggc
 300
 gtcgaggtcg accgcaagat gctcgctgag cttgccgtct ccgacattaa cgccttcaac
 360
 agcctggctg aggtcgctaa ggctagccag ccgcagaacg ctgctgcctg agatggccat
 420
 gactggcggg ccgaacgacg actatttggg atgggacgc atctcgaagg ggtcattgcg
 480
 ttcggcccggt cgtctttcat ctccggcggg acgcgatgag tccgggctgt tcttggtaga
 540
 aggtgcgcag gcagttcgtg aagccctagc atggccgggt aaagtcaatt tgttggaac
 600
 ctccgaccca gtcgcgatg ctgagcatgt cgaggaggct acatgtcgtg gcgttcgggt
 660
 cgtggtgctc actgacgagg atgtcaatgc gctttctgat accgtcacca gtcaggggat
 720
 cttcgcggta tgcggcagg ttacgcgt
 748

<210> 1336
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 1336
 Xaa Leu Ile Leu Phe Phe Pro Ile Pro Ile Pro Pro Leu Ser Asp Arg
 1 5 10 15
 Val Lys Arg Ser Val Asn Ala Lys Lys Arg Arg Glu Val Leu Asp
 20 25 30
 Gln Ala Ser Gly Tyr Arg Gly Gln Arg Ser Arg Leu Tyr Arg Lys Ala
 35 40 45
 Lys Glu Gln Thr Leu His Ser Ala Thr Tyr Ser Phe Arg Asp Arg Arg
 50 55 60
 Ala Lys Lys Gly Asp Phe Arg Ser Leu Trp Ile Gln Arg Ile Asn Ala
 65 70 75 80
 Ala Ser Arg Ala Gln Gly Met Thr Tyr Asn Arg Phe Ile Asn Gly Leu
 85 90 95
 Lys Asn Ala Gly Val Glu Val Asp Arg Lys Met Leu Ala Glu Leu Ala
 100 105 110
 Val Ser Asp Ile Asn Ala Phe Asn Ser Leu Val Glu Val Ala Lys Ala
 115 120 125
 Ser Gln Pro Gln Asn Ala Ala Ala
 130 135

<210> 1337
 <211> 364
 <212> DNA
 <213> Homo sapiens

<400> 1337
 acgcgtgagg ccaggccact gggcaccgcc gttagccagg gcagcctcct tcagtgggtca
 60

aggcagactc agctcatggg cgagcatgtc agtgaagggc acagcaaggc tcacgagtgg
 120
 gcctcttgcc tcatggtcag tgtgggtcag tgctttcgct gtatgagact acagggtttc
 180
 tctgcctcac catgggggac gattgggtct gggtcacttc ctgctgtggg acctgtcctg
 240
 ggcaactgcag gatgtggggc agggctccta cgtgccagct accagatgcc agcagcacc
 300
 ccagaagtga caaccacaac catctccagg tgttgccagt gtcccctggg ggtcagagtg
 360
 gccc
 364

<210> 1338
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 1338
 Met Gly Glu His Val Ser Glu Gly His Ser Lys Ala His Glu Trp Ala
 1 5 10 15
 Ser Cys Leu Met Val Ser Val Gly Gln Cys Phe Arg Cys Met Arg Leu
 20 25 30
 Gln Gly Phe Ser Ala Ser Pro Trp Gly Thr Ile Gly Ser Gly Ser Leu
 35 40 45
 Pro Ala Val Gly Pro Val Leu Gly Thr Ala Gly Cys Gly Ala Gly Leu
 50 55 60
 Leu Arg Ala Ser Tyr Gln Met Pro Ala Ala Pro Pro Glu Val Thr Thr
 65 70 75 80
 Thr Thr Ile Ser Arg Cys Cys Gln Cys Pro Leu Gly Val Arg Val Ala
 85 90 95

<210> 1339
 <211> 653
 <212> DNA
 <213> Homo sapiens

<400> 1339
 cgcgttgtct tcaacatcga cgaaaagcag tgcattgacc tggcgccacg tgggtactgag
 60
 tgggtcgtca ggtacgccga caagtacctc ggcgacgttg agttcggcta cgagtactct
 120
 ccggagatgt ttagccagac ccgcacggac ttcgctatcg acgtctgtca ctccgtgatg
 180
 gacgtgtggc agccggggcc aggccgtgag attatcctta atctgccggc taccgtcgag
 240
 atgagtactc cgaacaccta cgccgaccaa atcgagtact tctgccgcaa tatccgtgat
 300
 cgtgagcacg tgtgcgtctc tttgcacccg cacaatgata gtggcacggc gatcgcggcc
 360
 gccgagttcg cgcagatggc gggcgccgat cgcgtcgagg gctgtttctt tggccccggc
 420
 gagcgcgccg gcaccgtcga cctggtcacc ctgggcatga acctcgtcag ccagggaagt
 480

gacgccggta tcgactttctc cgacatgccc aagatccgcc gcaccgtcga gtactgcacc
 540
 tgtctgccag taccggccccg ccagccctac tccggcgatc tggctttcac cgcctttctcc
 600
 gggtcccacc aggacgccat caagaagggt ctggaagacc tggcccggcg cgc
 653

<210> 1340

<211> 217

<212> PRT

<213> Homo sapiens

<400> 1340

Arg	Val	Val	Phe	Asn	Ile	Asp	Glu	Lys	Gln	Cys	Ile	Asp	Leu	Ala	His
1				5					10					15	
Arg	Gly	Thr	Glu	Trp	Val	Val	Arg	Tyr	Ala	Asp	Lys	Tyr	Leu	Gly	Asp
			20					25					30		
Val	Glu	Phe	Gly	Tyr	Glu	Tyr	Ser	Pro	Glu	Met	Phe	Ser	Gln	Thr	Arg
		35					40					45			
Thr	Asp	Phe	Ala	Ile	Asp	Val	Cys	His	Ser	Val	Met	Asp	Val	Trp	Gln
	50					55					60				
Pro	Gly	Pro	Gly	Arg	Glu	Ile	Ile	Leu	Asn	Leu	Pro	Ala	Thr	Val	Glu
65					70					75				80	
Met	Ser	Thr	Pro	Asn	Thr	Tyr	Ala	Asp	Gln	Ile	Glu	Tyr	Phe	Cys	Arg
				85					90					95	
Asn	Ile	Arg	Asp	Arg	Glu	His	Val	Cys	Val	Ser	Leu	His	Pro	His	Asn
			100					105					110		
Asp	Arg	Gly	Thr	Ala	Ile	Ala	Ala	Ala	Glu	Phe	Ala	Gln	Met	Ala	Gly
		115					120					125			
Ala	Asp	Arg	Val	Glu	Gly	Cys	Phe	Phe	Gly	Pro	Gly	Glu	Arg	Pro	Gly
	130					135					140				
Thr	Val	Asp	Leu	Val	Thr	Leu	Gly	Met	Asn	Leu	Val	Ser	Gln	Gly	Val
145					150					155				160	
Asp	Ala	Gly	Ile	Asp	Phe	Ser	Asp	Met	Pro	Lys	Ile	Arg	Arg	Thr	Val
				165					170					175	
Glu	Tyr	Cys	Thr	Cys	Leu	Pro	Val	Pro	Ala	Arg	Gln	Pro	Tyr	Ser	Gly
			180					185					190		
Asp	Leu	Val	Phe	Thr	Ala	Phe	Ser	Gly	Ser	His	Gln	Asp	Ala	Ile	Lys
	195						200					205			
Lys	Gly	Leu	Glu	Asp	Leu	Ala	Arg	Arg							
	210					215									

<210> 1341

<211> 666

<212> DNA

<213> Homo sapiens

<400> 1341

accggttgct gatttccttg ttggagtctt caccactatg agcagtgact ccattgtttt
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 gcaaagtctt ttgccttgct ttgatcatat tttcacaact ggattcccaa cagaagtgtg
 120
 gcaatctgta atagaaaagt tggcaaagaa aggattatgg cattcatttc tgettctgtc
 180

agcaaaaaaa gaccgattac caagaaatat tcatgtccca gagttatcac tgaaaagtct
 240
 ctttgagaaa tacgttttca ttggacttta tgagaagatg gaacaagtgc ccaagttagt
 300
 ccagtggctc atctccattg gtgcaagtgt tgagactata ggaccgtatc cccttcattg
 360
 cctcatgcga ctctgtatcc aagccagaga aaaccatctt ttccggtggt taatggatca
 420
 caagcccgag tggaaaggcc gcattaacca gaaggatggg gatggctgca ctgtcctgca
 480
 cgtcgtcgct gcccaactccc caggatacct cgtaaagcga caaacagagg atgtgcagat
 540
 gctcctgcgc tttggggcag atcccacttt gctggatcga cagtctcggt ctgttgtgga
 600
 tgtcctgaag aggaataaga acttcaaagc catcgagaaa atcaacagtc acttagaaaa
 660
 gctagc
 666

<210> 1342

<211> 209

<212> PRT

<213> Homo sapiens

<400> 1342

Met	Ser	Ser	Asp	Ser	Ile	Val	Leu	Gln	Ser	Phe	Leu	Pro	Cys	Phe	Asp
1				5					10					15	
His	Ile	Phe	Thr	Thr	Gly	Phe	Pro	Thr	Glu	Val	Trp	Gln	Ser	Val	Ile
			20					25					30		
Glu	Lys	Leu	Ala	Lys	Lys	Gly	Leu	Trp	His	Ser	Phe	Leu	Leu	Leu	Ser
		35				40						45			
Ala	Lys	Lys	Asp	Arg	Leu	Pro	Arg	Asn	Ile	His	Val	Pro	Glu	Leu	Ser
	50				55					60					
Leu	Lys	Ser	Leu	Phe	Glu	Lys	Tyr	Val	Phe	Ile	Gly	Leu	Tyr	Glu	Lys
65				70					75					80	
Met	Glu	Gln	Val	Pro	Lys	Leu	Val	Gln	Trp	Leu	Ile	Ser	Ile	Gly	Ala
			85					90						95	
Ser	Val	Glu	Thr	Ile	Gly	Pro	Tyr	Pro	Leu	His	Ala	Leu	Met	Arg	Leu
			100					105					110		
Cys	Ile	Gln	Ala	Arg	Glu	Asn	His	Leu	Phe	Arg	Trp	Leu	Met	Asp	His
		115				120						125			
Lys	Pro	Glu	Trp	Lys	Gly	Arg	Ile	Asn	Gln	Lys	Asp	Gly	Asp	Gly	Cys
	130				135						140				
Thr	Val	Leu	His	Val	Val	Ala	Ala	His	Ser	Pro	Gly	Tyr	Leu	Val	Lys
145				150					155					160	
Arg	Gln	Thr	Glu	Asp	Val	Gln	Met	Leu	Leu	Arg	Phe	Gly	Ala	Asp	Pro
			165					170					175		
Thr	Leu	Leu	Asp	Arg	Gln	Ser	Arg	Ser	Val	Val	Asp	Val	Leu	Lys	Arg
		180				185						190			
Asn	Lys	Asn	Phe	Lys	Ala	Ile	Glu	Lys	Ile	Asn	Ser	His	Leu	Glu	Lys
		195				200						205			
Leu															

<210> 1343
 <211> 270
 <212> DNA
 <213> Homo sapiens

<400> 1343
 ccggaatgt gccgagttct cctgacgcac gaagtgatgt gtagtcgatg ctgcgaaaag
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 aaaagctgtg gaaaccgaaa tgagactcca tcggacccag tcataattga cagattcttt
 120
 ttaaaatttt tcctcaagtg caatcagaat tgtttgaaaa cagcaggaaa cccaagggac
 180
 atgagacggt ttcaggttgt gttgtcaaca acggtgaatg tggatggaca cgctctggct
 240
 gtttctgaca acatgtttgt tcataacaac
 270

<210> 1344
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 1344
 Pro Glu Met Cys Arg Val Leu Leu Thr His Glu Val Met Cys Ser Arg
 1 5 10 15
 Cys Cys Glu Lys Lys Ser Cys Gly Asn Arg Asn Glu Thr Pro Ser Asp
 20 25 30
 Pro Val Ile Ile Asp Arg Phe Phe Leu Lys Phe Phe Leu Lys Cys Asn
 35 40 45
 Gln Asn Cys Leu Lys Thr Ala Gly Asn Pro Arg Asp Met Arg Arg Phe
 50 55 60
 Gln Val Val Leu Ser Thr Thr Val Asn Val Asp Gly His Val Leu Ala
 65 70 75 80
 Val Ser Asp Asn Met Phe Val His Asn Asn
 85 90

<210> 1345
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 1345
 acgcgtttga aaccacccga tgacttgctg gtgatecttg gtaccgcgt cagcaacttc
 60
 agcggcaccg acaacaccga cttctacgac ccgaccaagg ccgacaaccg tctcacctac
 120
 cgccagacgg gcgtcgtcac gccctatgcc ggcatcgtct acgacctgaa tgacatctgg
 180
 tcggtgtaca ccagctacac caagatctac aagccgcaga acagcaagga cgccgaccgc
 240
 aagttgctcg atccgattga aggtgacacc tacgaagccg ggctcaaggc agcgtttttc
 300
 gacggccgcc tgaacgccag ttttgccgca ttccgcatcg aacaggacaa cgctgcacag
 360

tacgtttccg ggtttgagac cgactcgtgt atcgccatt gc
402

<210> 1346
<211> 134
<212> PRT
<213> Homo sapiens

<400> 1346
Thr Arg Leu Lys Pro Thr Asp Asp Leu Ser Val Ile Leu Gly Thr Arg
1 5 10 15
Val Ser Asn Phe Ser Gly Thr Asp Asn Thr Asp Phe Tyr Asp Pro Thr
20 25 30
Lys Ala Asp Asn Arg Leu Thr Tyr Arg Gln Thr Gly Val Val Thr Pro
35 40 45
Tyr Ala Gly Ile Val Tyr Asp Leu Asn Asp Ile Trp Ser Val Tyr Thr
50 55 60
Ser Tyr Thr Lys Ile Tyr Lys Pro Gln Asn Ser Lys Asp Ala Asp Arg
65 70 75 80
Lys Leu Leu Asp Pro Ile Glu Gly Asp Thr Tyr Glu Ala Gly Leu Lys
85 90 95
Ala Ala Phe Phe Asp Gly Arg Leu Asn Ala Ser Phe Ala Ala Phe Arg
100 105 110
Ile Glu Gln Asp Asn Val Ala Gln Tyr Val Ser Gly Phe Glu Thr Asp
115 120 125
Ser Cys Ile Ala His Cys
130

<210> 1347
<211> 415
<212> DNA
<213> Homo sapiens

<400> 1347
naccaccttc tgggcaggct ctcattcttt cattccaaga agcatttatt aaagactggc
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tagggcgagg gaaccagct aggggctggg gataaaaaat aagaaataac tgaaggacct
120
tgctcttaag gaactccatc ttactgggtg gagccaaacg agaaaagaga gctcgggagg
180
gcaccaaagc ggtcttgccg aaattgectg aggcagggga aggggcacgc tttctgaaaa
240
acccccccaa accgattcca ggaagcccaa agggcggccc ctctgcccgc agcactgcct
300
tcacgtttac ttccatcccg gcctcctcct tcccctaagg cttggcatgc aacatccctg
360
cttctcacc cctttttatt taagactcct attatctgca cacaatggaa gttag
415

<210> 1348
<211> 105
<212> PRT
<213> Homo sapiens

<400> 1348

Met Glu Val Asn Val Lys Ala Val Leu Arg Ala Glu Gly Pro Pro Phe
 1 5 10 15
 Gly Leu Pro Gly Ile Gly Leu Gly Gly Phe Phe Arg Lys Arg Ala Pro
 20 25 30
 Ser Pro Ala Ser Gly Asn Phe Gly Lys Thr Ala Leu Val Pro Ser Arg
 35 40 45
 Ala Leu Phe Ser Arg Leu Ala Pro Pro Ser Lys Met Glu Phe Leu Lys
 50 55 60
 Ser Lys Val Leu Gln Leu Phe Leu Ile Phe Tyr Pro Gln Pro Leu Ala
 65 70 75 80
 Gly Phe Pro Arg Pro Ser Gln Ser Leu Ile Asn Ala Ser Trp Asn Glu
 85 90 95
 Arg Met Arg Ala Cys Pro Glu Gly Gly
 100 105

<210> 1349

<211> 924

<212> DNA

<213> Homo sapiens

<400> 1349

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 gctcagacgg tcatgcgttc gatcgccgaa aagcttggcc ttccgggtcat cgtaagccg
 120
 gcacgtgggg gctcaagcct cggcgtcaca aaagtcgatg gcgtcgacga tcttcctcag
 180
 gccgtcgca acgcctatgc ctatgacgac atggtttag tagaggaatt cattgtgggc
 240
 aacgaactcg caataggcat gatcacgacg tctgaaggca cgcgtgtgct gccagcgc
 300
 gagattcgcc ctgtcggtag tgtttatgat tattcagcga tgtacaccgg tggtagagaca
 360
 cgactaacag ctctgcaga cattagcgat acggcggccc aaaccgcgac ggcgatggcc
 420
 cgagtcgtgc aaaaggagct cgattttctc gggatatctc gtgtcgatgc gatcgtggac
 480
 gagtccggtc gccagtttt cttggaggcc ggtgctgctc ccgggatgac agctacttcg
 540
 ctctgacccg tggctatgaa agctgccggt cttagacctg gcgagggtgtg ctctcgacta
 600
 gtcgatgacg tcgctcgcaa ccattggctga cagtgtgcac acgaggggct cgcgccacgc
 660
 cgtgcgcgtc aagcaggcat ctgtcgtctt gctcggcgct gtccttgcca gtgtgatggt
 720
 cttcctcgga ctgtggcaga tgaacgtttt tgagtcccaa cgtgacgact cgacgcaggc
 780
 gcgtatcaac gagccagtga tcacctggaa tgaggcgctt aagaaggcca gtgtcatggc
 840
 tcagtacgga cgccgggtga cggtgacggg cacgttccaa ccgtcgacca caaccttgat
 900
 aggcacatcg tggccagtac gcgt
 924

<210> 1350
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 1350
 Ala Gly Ile Val Thr Pro Gln Gln Val Ala Leu Pro His Asp Val Phe
 1 5 10 15
 Arg Glu Leu Gly Ala Gln Thr Val Met Arg Ser Ile Ala Glu Lys Leu
 20 25 30
 Gly Leu Pro Val Ile Val Lys Pro Ala Arg Gly Gly Ser Ser Leu Gly
 35 40 45
 Val Thr Lys Val Asp Gly Val Asp Asp Leu Pro Gln Ala Val Ala Asn
 50 55 60
 Ala Tyr Ala Tyr Asp Asp Met Val Val Val Glu Glu Phe Ile Val Gly
 65 70 75 80
 Asn Glu Leu Ala Ile Gly Met Ile Thr Thr Ser Glu Gly Thr Arg Val
 85 90 95
 Leu Pro Ala Val Glu Ile Arg Pro Val Gly Gly Val Tyr Asp Tyr Ser
 100 105 110
 Ala Met Tyr Thr Gly Gly Glu Thr Arg Leu Thr Ala Pro Ala Asp Ile
 115 120 125
 Ser Asp Thr Ala Ala Gln Thr Ala Thr Ala Met Ala Arg Val Val Gln
 130 135 140
 Lys Glu Leu Asp Phe Ser Gly Ile Ser Arg Val Asp Ala Ile Val Asp
 145 150 155 160
 Glu Ser Gly Arg Pro Val Phe Leu Glu Ala Gly Ala Ala Pro Gly Met
 165 170 175
 Thr Ala Thr Ser Leu Val Pro Val Ala Met Lys Ala Ala Gly Leu Asp
 180 185 190
 Leu Gly Glu Val Cys Ser Arg Leu Val Asp Asp Val Ala Arg Asn His
 195 200 205
 Gly

<210> 1351
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 1351
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 60
 gacgagacgc aaaacgcatt gcttctcagt attctgctgc accccggtct gctcatcgtc
 120
 gaccacattc acttccagta caacgggttc ctaattcgcg ggccccttta tcgtttgggg
 180
 gcccgacgg acgcatcggc cctctttctc tgaaccgccc tgtttgccct gctgctccag
 240
 ttcaagcaca ttacgtata cgtcgcgccg gcgtactttg tgtacctgct gcgtgcgtac
 300
 atgctcccga gcatgccgac gtccgcatcg acggggagcg cggcgatcga tcgcaccatc
 360

aagcttggcg cagcgacgct ggtgccttcc tgctgagc
398

<210> 1352
<211> 70
<212> PRT
<213> Homo sapiens

<400> 1352
Xaa Cys Thr Glu Gly Val Leu Val Tyr Ala Leu Tyr Leu Leu Ser Arg
1 5 10 15
Cys Thr Met Gly Asp Glu Thr Gln Asn Ala Leu Leu Leu Ser Ile Leu
20 25 30
Leu His Pro Gly Leu Leu Ile Val Asp His Ile His Phe Gln Tyr Asn
35 40 45
Gly Phe Leu Ile Arg Gly Pro Leu Tyr Arg Leu Gly Ala Arg Thr Asp
50 55 60
Ala Ser Ala Leu Phe Leu
65 70

<210> 1353
<211> 480
<212> DNA
<213> Homo sapiens

<400> 1353
ngggcccaaa tccctagcct agggcctgga ggtccctga gtttgctcag ccaactcatt
60
accctcacac ccaccccacc cccagtcaca cggatcgtgc ggggcattgg acagcctcgg
120
ggcaacatgc tcttggtggg tatcgggggc agcggacgcc agagtctggc ccgcctggct
180
tcattccatct gcgactacac caccttccag atcgagggtca ccaaacatta tcggaagcag
240
gagttccgag atgatatcaa gcgtctgtat cgccaggctg ggggtggagct caagaccacg
300
tccttcattt ttgtggacac ccaaatagct gatgagtcct tcctagagga catcaacaac
360
atcctcagct caggcgaggt gcccacatctt ttcaggcctg atgaatttga agagatccag
420
tcgcatatca tagaccaggc ccgggtggag cagggtgcctg agtcatcgga cagcctcttc
480

<210> 1354
<211> 160
<212> PRT
<213> Homo sapiens

<400> 1354
Xaa Ala Pro Ile Pro Ser Leu Gly Pro Gly Gly Pro Leu Ser Leu Leu
1 5 10 15
Ser Gln Leu Ile Thr Leu Thr Pro Thr Pro Pro Val Thr Arg Ile
20 25 30
Val Arg Gly Ile Gly Gln Pro Arg Gly Asn Met Leu Leu Val Gly Ile

```

          35          40          45
Gly Gly Ser Gly Arg Gln Ser Leu Ala Arg Leu Ala Ser Ser Ile Cys
   50          55          60
Asp Tyr Thr Thr Phe Gln Ile Glu Val Thr Lys His Tyr Arg Lys Gln
65          70          75          80
Glu Phe Arg Asp Asp Ile Lys Arg Leu Tyr Arg Gln Ala Gly Val Glu
          85          90          95
Leu Lys Thr Thr Ser Phe Ile Phe Val Asp Thr Gln Ile Ala Asp Glu
          100          105          110
Ser Phe Leu Glu Asp Ile Asn Asn Ile Leu Ser Ser Gly Glu Val Pro
          115          120          125
His Leu Phe Arg Pro Asp Glu Phe Glu Glu Ile Gln Ser His Ile Ile
          130          135          140
Asp Gln Ala Arg Val Glu Gln Val Pro Glu Ser Ser Asp Ser Leu Phe
145          150          155          160

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<210> 1355

<211> 1063

<212> DNA

<213> Homo sapiens

<400> 1355

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gccctgtcct aggccccacc cggtcagtgc acacctgctc cccagtcccg cctccacaaa
120
ggccctgtga gacctgtcc tccaccgctt ctttcttgtt gtccattccc tgagcctggg
180
gaagttgcgt cagagccaca ggtcggngag acgctgagtc tgggcgagcg cttgctgccg
240
gacagctgga gaaacagcag cggggggccg tgtccatgtg gcaagccaag ccatcgaggg
300
gateacaggc cccttcaggg aagggactga gcacctgcca cctgcctcca ggatgggcct
360
gateccccct cctgtgtacc ccacaggctg cagtgcacct gccagcaca cactgcggg
420
ggcacctgcg accgctgctg ccccggttcc aatcagcagc cgtggaagcc tgcgactgcc
480
aacagtgcc aagagtgcc gtctgtaac tgctacggcc atgccaccga ctgttactac
540
gacctgagg tggaccggcg ccgcgccagc cagagcctgg atggcaccta tcagggtggg
600
ggtgtctgta tcgactgcca gcaccacacc gccggcgtca actgtgagcg ctgcctgccc
660
ggcttctacc gctctcccaa ccacctctc gactcgcccc acgtctgccg ccgctgcaac
720
tgcgagtccg acttcacgga tggcacctgc gaggacctga cgggtcgatg ctactgccg
780
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840
tgctaccgga cgccctcgtc ctccaatgac accagggagc aggtgctgcc agccggccag
900
attgtgaatt gtgactgcag cgcggcaggg acccagggca acgcttgccg gaaggaccca
960

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aggggtgggcc gctgttttgc caaccccaac ttccaaggca cccattgtga gctctgcgcg
 1020
 ccagggttct acggccccgg ctgccctggg tcccttcacg cgt
 1063

<210> 1356
 <211> 244
 <212> PRT
 <213> Homo sapiens

<400> 1356
 Ala Pro Ala Thr Cys Leu Gln Asp Gly Pro Asp Pro Pro Ser Cys Val
 1 5 10 15
 Pro His Arg Leu Gln Cys Thr Cys Gln His Asn Thr Cys Gly Gly Thr
 20 25 30
 Cys Asp Arg Cys Cys Pro Gly Phe Asn Gln Gln Pro Trp Lys Pro Ala
 35 40 45
 Thr Ala Asn Ser Ala Asn Glu Cys Gln Ser Cys Asn Cys Tyr Gly His
 50 55 60
 Ala Thr Asp Cys Tyr Tyr Asp Pro Glu Val Asp Arg Arg Arg Ala Ser
 65 70 75 80
 Gln Ser Leu Asp Gly Thr Tyr Gln Gly Gly Gly Val Cys Ile Asp Cys
 85 90 95
 Gln His His Thr Ala Gly Val Asn Cys Glu Arg Cys Leu Pro Gly Phe
 100 105 110
 Tyr Arg Ser Pro Asn His Pro Leu Asp Ser Pro His Val Cys Arg Arg
 115 120 125
 Cys Asn Cys Glu Ser Asp Phe Thr Asp Gly Thr Cys Glu Asp Leu Thr
 130 135 140
 Gly Arg Cys Tyr Cys Arg Pro Asn Phe Ser Gly Glu Arg Cys Asp Val
 145 150 155 160
 Cys Ala Glu Gly Phe Thr Gly Phe Pro Ser Cys Tyr Pro Thr Pro Ser
 165 170 175
 Ser Ser Asn Asp Thr Arg Glu Gln Val Leu Pro Ala Gly Gln Ile Val
 180 185 190
 Asn Cys Asp Cys Ser Ala Ala Gly Thr Gln Gly Asn Ala Cys Arg Lys
 195 200 205
 Asp Pro Arg Val Gly Arg Cys Phe Ala Asn Pro Asn Phe Gln Gly Thr
 210 215 220
 His Cys Glu Leu Cys Ala Pro Gly Phe Tyr Gly Pro Gly Cys Pro Gly
 225 230 235 240
 Ser Leu His Ala

<210> 1357
 <211> 663
 <212> DNA
 <213> Homo sapiens

<400> 1357
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 ccaagttggt ccagctgggc catatacggc cccaggtgcg gattcgggtac cgaagttgaa
 120

ttcaacacccc ccgttttgcc tgtggggggg gtacgccctg taatcctgca aaggcccggt
 180
 tgggtgtccgg ggggttttcgt cgggtctcccc aaccatcatc tagacggcgt ggcgatgtgg
 240
 tgcgagctgc ttgcggcggt gttctgtgcc cgagcttgcc tcgcctggct gcaagaatcc
 300
 ctggctcatc gagcttcagc gtcagtcaag tcgcaattgc ggcgcgacat cctgcaagcc
 360
 aggttgtcgc gtcccactga cgcaacaatg ccgtcgagaa ccctcatcag cctgatgaca
 420
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<212> PRT
<213> Homo sapiens
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1161

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 290 295 300
 Leu Pro Phe Phe Gln Asp Arg Pro Trp Ala Arg Gly Thr Ala Glu Ala
 305 310 315 320
 Ala His Glu Cys Leu Pro Cys Asn Cys Ser Gly Arg Ser Glu Glu Cys
 325 330 335
 Thr Phe Asp Arg Glu Leu Phe Arg Ser Thr Gly His Gly Gly Arg Cys
 340 345 350
 His His Cys Arg Asp His Thr Ala Gly Pro His Cys Glu Arg Cys Gln
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 Glu Asn Phe Tyr His Trp Asp Pro Arg Met Pro Cys Gln Pro Cys Asp
 370 375 380
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 385 390 395 400
 Cys Ala Cys Lys Pro Thr Val Thr Gly Trp Lys Cys Asp Arg Cys Leu
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 Pro Gly Phe His Ser Leu Ser Glu Gly Gly Cys Arg Pro Cys Thr Cys
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 Asn Pro Ala Gly Ser Leu Asp Thr Cys Asp Pro Arg Ser Gly Arg Cys
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 Pro Cys Lys Glu Asn Val Glu Gly Asn Leu Cys Asp Arg Cys Arg Pro
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 Gly Thr Phe Asn Leu Gln Pro His Asn Pro Ala Gly Cys Ser Ser Cys
 465 470 475 480
 Phe Cys Tyr Gly His Ser Lys Val Cys Ala Ser Thr Ala Gln Phe Gln
 485 490 495
 Val His His Ile Leu Ser Asp Phe His Gln Gly Ala Glu Gly Trp Trp
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 Ala Arg Ser Val Gly Gly Ser Glu His Ser Pro Gln Trp Ser Pro Asn
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 Gly Val Leu Leu Ser Pro Glu Asp Glu Glu Glu Leu Thr Ala Pro Gly
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 Lys Phe Leu Gly Asp Gln Arg Phe Ser Tyr Gly Gln Pro Leu Ile Leu
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 565 570 575
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 580 585 590
 Gly Pro Gln Asp Ala Arg Ala Ser Gln Gly Gly Arg Ala Gln Val Pro
 595 600 605
 Leu Gln Glu Thr Ser Glu Asp Val Ala Pro Pro Leu Pro Pro Phe His
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 Phe Gln Arg Leu Leu Ala Asn Leu Thr Ser Leu Arg Leu Arg Val Ser
 625 630 635 640
 Pro Gly Pro Ser Pro Ala Gly Pro Val Phe Leu Thr Glu Val Arg Leu
 645 650 655
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Ile Cys Val Cys Ser His His Thr Glu Gly Pro Ser Cys Glu Arg Cys				
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Leu Pro Gly Phe Tyr Gly Asn Pro Phe Ala Gly Gln Ala Asp Asp Cys				
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Gln Pro Cys Pro Cys Pro Gly Gln Ser Ala Cys Thr Thr Ile Pro Glu				
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Ser Gly Glu Val Val Cys Thr His Cys Pro Pro Gly Gln Arg Gly Arg				
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Arg Cys Glu Val Cys Asp Asp Gly Phe Phe Gly Asp Pro Leu Gly Leu				
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Phe Gly His Pro Gln Pro Cys His Gln Cys Gln Cys Ser Gly Asn Val				
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Asp Pro Asn Ala Val Gly Asn Cys Asp Pro Leu Ser Gly His Cys Leu				
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Arg Cys Leu His Asn Thr Thr Gly Asp His Cys Glu His Cys Gln Glu				
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Asp Cys Ser Arg Cys Tyr Pro Gly Phe Phe Asp Leu Gln Pro Gly Arg				
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Gly Cys Arg Ser Cys Lys Cys His Pro Leu Gly Ser Gln Glu Asp Gln				
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Cys His Pro Lys Thr Gly Gln Cys Thr Cys Arg Pro Gly Val Thr Gly				
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Gln Ala Cys Asp Arg Cys Gln Leu Gly Phe Phe Gly Ser Ser Ile Lys				
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Gly Cys Arg Ala Cys Arg Cys Ser Pro Leu Gly Ala Ala Ser Ala Gln				
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Cys His Tyr Asn Gly Thr Cys Val Cys Arg Pro Gly Phe Glu Gly Tyr				
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Lys Cys Asp Arg Cys His Tyr Asn Phe Phe Leu Thr Ala Asp Gly Thr				
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Ala Lys Leu Lys Ala Arg Leu Thr Leu Thr Glu Gly Trp Leu Gln Gly				
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Ser Asp Cys Gly Ser Trp Gly Pro Leu Asp Ile Leu Leu Gly Glu				
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Ala Pro Arg Gly Asp Val Tyr Gln Gly His His Leu Leu Pro Gly Ala				
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Arg Glu Ala Phe Leu Glu Gln Met Met Gly Leu Glu Gly Ala Val Lys				
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Ala Ala Arg Glu Gln Leu Gln Arg Leu Asn Lys Gly Ala Arg Cys Ala				
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Gln Ala Gly Ser Gln Lys Thr Cys Thr Gln Leu Ala Asp Leu Glu Ala				
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 Phe Met Val Ala Pro Pro Met Arg His Leu His Leu Pro Ser His Pro
 50 55 60
 Leu Lys Gln Pro His Leu Cys Arg Phe Arg Arg Phe Leu Leu Arg Leu
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 <213> Homo sapiens

<400> 1365

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 <212> PRT
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<400> 1368
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 20 25 30
 Ala Ser Ser Thr Ala Lys Ala Pro Ser Ser Ala Ser Pro Thr Ser Leu
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 Ala Thr Ser Thr Thr Pro Pro Trp Ser Ser Pro Pro Ser Thr Ala Ser
 50 55 60
 Gly Trp Pro Arg Ser Ala Pro Ser Ser Ala Pro Pro Ser Pro Thr Ser
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 Thr Arg

<210> 1369
 <211> 356
 <212> DNA
 <213> Homo sapiens

<400> 1369
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 tgtgcccag agttccgcaa actgggcttt tctaacagca acccagcaca ggacctggag
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 356

<210> 1370
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1370
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      20             25             30
Gln Glu Gln Arg Glu Gln Leu Gln Val Leu Arg Gln Ala Ala Phe Glu
      35             40             45
Val Glu Gly Glu Ser Ser Gly Ala Gly Leu Ser Ala Asp Arg Arg Arg
      50             55             60
Ser Leu Cys Ala Arg Glu Phe Arg Lys Leu Gly Phe Ser Asn Ser Asn
      65             70             75             80
Pro Ala Gln Asp Leu Glu Arg Val Pro Pro Gly Leu Leu Ala Leu Asp
      85             90             95
Asn Met Leu Tyr Phe Ser Arg Asn
      100

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<210> 1371
 <211> 648
 <212> DNA
 <213> Homo sapiens

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<210> 1372
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 <213> Homo sapiens

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      20             25             30
Phe Leu Phe Val Glu Arg Ala Val Arg Leu Thr Gln Gln Leu Leu Glu

```

```

          35          40          45
Cys Leu Gly His Leu Arg Ala Trp Lys Val His Ala Leu Thr Arg Val
          50          55          60
Met Thr Thr Ile Ser Pro Lys Leu Ser Ser Cys His Pro Ile Gly Ser
65          70          75          80
Ile Asp Gln Lys Gly Lys Ser Ser Val Leu Lys Leu Ile Asn Gln Leu
          85          90          95
Lys Leu Tyr Leu Gln
          100

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<210> 1373
 <211> 369
 <212> DNA
 <213> Homo sapiens

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<400> 1373
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120
acatggggttt catgggtcga catgggttcc gtgtcctgct tgccgggcct gagctgtttg
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240
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369

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<210> 1374
 <211> 98
 <212> PRT
 <213> Homo sapiens

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<400> 1374
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20          25          30
Glu Leu Phe Val Arg Cys Thr Thr Glu Asn Leu Ala Asp Gln Asn Pro
35          40          45
Arg Leu Arg Ser Met Cys Val Pro Gly Arg Asp Thr Ser Cys Trp Arg
50          55          60
Arg Lys Pro Ser Val Tyr Leu Glu Ala Lys Gly Phe Leu Asn Arg Gly
65          70          75          80
Cys Ala Gly Leu Leu Lys Val Leu Thr Gln Ala Ser Glu Val Asn Pro
85          90          95
Leu Arg

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<210> 1375
 <211> 282

<212> DNA
 <213> Homo sapiens

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 ctggtggccc agtcgttcat gagcgtggag aaccgggccc ccacaaagga gtcccagtga
 180
 cattgggacg atccggaaat tcgcaatgca cacggtgcag gacaccaatc tgaagagaac
 240
 ggccccagc atgagcggcc gcggcttgge cctcatgcta gc
 282

<210> 1376
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 1376
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 1 5 10 15
 Phe His Leu His Gly Trp His Trp Pro Ala Phe Asn Ile Ala Asp Met
 20 25 30
 Ala Ile Val Gly Gly Ala Ile Ala Leu Val Ala Gln Ser Phe Met Ser
 35 40 45
 Val Glu Asn Pro Ala Ala Thr Lys Glu Ser Gln
 50 55

<210> 1377
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 <212> DNA
 <213> Homo sapiens

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<210> 1378
 <211> 798
 <212> PRT
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 35 40 45
 Asp Ser Phe Leu Gly Gly Leu Lys Trp Cys Ser Asp Gln Ser Glu Ile
 50 55 60
 Ile Ser Asn Gln Tyr Asn Asn Glu Pro Ser Asn Ile Phe Glu Lys Ile
 65 70 75 80
 Asp Glu Glu Asn Glu Ala Asn Leu Leu Ala Val Leu Thr Glu Thr Leu
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 Asp Ser Leu Pro Val Asp Glu Asp Gly Leu Pro Ser Phe Asp Ala Leu
 100 105 110
 Thr Asp Gly Asp Val Thr Thr Asp Asn Glu Ala Ser Pro Ser Ser Met

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      145      150      155      160
Cys Ser Gly Leu Ser Thr Gln Asn His Ala Asn His Asn His Arg Ile
      165      170      175
Arg Thr Asn Pro Ala Ile Val Lys Thr Glu Asn Ser Trp Ser Asn Lys
      180      185      190
Ala Lys Ser Ile Cys Gln Gln Gln Lys Pro Gln Arg Arg Pro Cys Ser
      195      200      205
Glu Leu Leu Lys Tyr Leu Thr Thr Asn Asp Asp Pro Pro His Thr Lys
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Pro Thr Glu Asn Arg Asn Ser Ser Arg Asp Lys Cys Thr Ser Lys Lys
      225      230      235      240
Lys Ser His Thr Gln Ser Gln Ser Gln His Leu Gln Ala Lys Pro Thr
      245      250      255
Thr Leu Ser Leu Pro Leu Thr Pro Glu Ser Pro Asn Asp Pro Lys Gly
      260      265      270
Ser Pro Phe Glu Asn Lys Thr Ile Glu Arg Thr Leu Ser Val Glu Leu
      275      280      285
Ser Gly Thr Ala Gly Leu Thr Pro Pro Thr Thr Pro Pro His Lys Ala
      290      295      300
Asn Gln Asp Asn Pro Phe Arg Ala Ser Pro Lys Leu Lys Ser Ser Cys
      305      310      315      320
Lys Thr Val Val Pro Pro Pro Ser Lys Lys Pro Arg Tyr Ser Glu Ser
      325      330      335
Ser Gly Thr Gln Gly Asn Asn Ser Thr Lys Lys Gly Pro Glu Gln Ser
      340      345      350
Glu Leu Tyr Ala Gln Leu Ser Lys Ser Ser Val Leu Thr Gly Gly His
      355      360      365
Glu Glu Arg Lys Thr Lys Arg Pro Ser Leu Arg Leu Phe Gly Asp His
      370      375      380
Asp Tyr Cys Gln Ser Ile Asn Ser Lys Thr Glu Ile Leu Ile Asn Ile
      385      390      395      400
Ser Gln Glu Leu Gln Asp Ser Arg Gln Leu Glu Asn Lys Asp Val Ser
      405      410      415
Ser Asp Trp Gln Gly Gln Ile Cys Ser Ser Thr Asp Ser Asp Gln Cys
      420      425      430
Tyr Leu Arg Glu Thr Leu Glu Ala Ser Lys Gln Val Ser Pro Cys Ser
      435      440      445
Thr Arg Lys Gln Leu Gln Asp Gln Glu Ile Arg Ala Glu Leu Asn Lys
      450      455      460
His Phe Gly His Pro Ser Gln Ala Val Phe Asp Asp Glu Ala Asp Lys
      465      470      475      480
Thr Gly Glu Leu Arg Asp Ser Asp Phe Ser Asn Glu Gln Phe Ser Lys
      485      490      495
Leu Pro Met Phe Ile Asn Ser Gly Leu Ala Met Asp Gly Leu Phe Asp
      500      505      510
Asp Ser Glu Asp Glu Ser Asp Lys Leu Ser Tyr Pro Trp Asp Gly Thr
      515      520      525
Gln Ser Tyr Ser Leu Phe Asn Val Ser Pro Ser Cys Ser Ser Phe Asn
      530      535      540
Ser Pro Cys Arg Asp Ser Val Ser Pro Pro Lys Ser Leu Phe Ser Gln

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<210> 1379
<211> 590
<212> DNA
<213> Homo sapiens
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<210> 1380

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1380

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		20						25					30		
Cys	Pro	Cys	Arg	Val	Ala	Ala	Ser	Pro	Ile	Ser	Ala	Leu	Gly	Val	Pro
		35					40					45			
Ala	Leu	Trp	Pro	Arg	His	Pro	Ser	Leu	Pro	Ser	Glu	Ser	Leu	Pro	Cys
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Gly	Arg	Val	Xaa	Pro	Ser	Leu	Pro	Ser	Glu	Ser	Leu	Pro	Cys	Gly	Arg
65					70				75					80	
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Pro	Pro	Leu	Pro	Ser	Val	Ser	Leu	Pro	Cys	Gly	Arg	Val	Xaa	Pro	Pro
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<210> 1381

<211> 433

<212> DNA

<213> Homo sapiens

<400> 1381

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120
gtgaggccac ggagagtcca ggccggagca cactgaccgc cttggctaag cattcatttc
180
cgtgtccttg ctgccatcag agaggaggca ggtccacacag atctgctctt gtttctgctg
240
gtctgaagtg gggtttcagt ttctgtgtgg aacaattcat taggggtttg atctcaaagc
300
ccaggcattg gccctgtacc tgttcctcac ggaagccgaa ctctgctta tgggccccag
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420
cagctctcca tgg
433

<210> 1382

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<400> 1383
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120
tctgcagctg gtctctgggag acccacggcc tctctctctc tgcccctgac caatacacca
180
caaacgcctc acatgagctc acccacaccc ccaagagcca tgggtgtcac aaagcaaaga
240
ccaagccaga ctcaatcttg tggccccagg gtcagccgca gagcagacaa ctagaacctc
300
acaagaagct gaacacaggc tgggtcacct ataaacaggg aggccatcct gaagggagga
360
agcacccaac cagagggtgaa ctcaccttgg accattcgac aatgcagtcc aggcagaagt
420
aatgggcaca gttctnccgg cgtccccacg gcctgggtctc tgaatgcgtt gagacagatt
480
gggcagctct ctgcatcatc atcagaattg aaagagccag cggtctccag tttcccctga
540
gtaccgcgta cctccagcaa tgtctccccg tcgtcttcag aatcctcgga accagatctg
600
tcttcaggt cttctctctc agacgcccc tcgtcttctc cgtctgtgcc atctccatgc
660
tcgtgtcac tgtcgtcccc agagtcccca ctgctgcccc cgctgcttcc ttcaaagtca
720
cctgcgggt ccgcagggcc gacctgtggg tgtccatccg gccttggggt ccggggcaca
780

```

agctcatcca ggctgtcgtc atccattgct gcacattgag ctcagctccg gaaacctcgt
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 900
 cggccg
 906

<210> 1384
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 1384
 Xaa Pro Val Phe Ser Val Ser Thr Glu Arg Thr Thr Cys Gln Gly Ser
 1 5 10 15
 Lys Val Thr Thr His His Ser Thr Pro Ala Ser Gly Leu Gln Ala Lys
 20 25 30
 Met Ala Pro Met Ser Thr Arg Val Ser Ala Ala Gly Pro Gly Arg Pro
 35 40 45
 Thr Ala Ser Ser Leu Leu Pro Leu Thr Asn Thr Pro Gln Thr Pro His
 50 55 60
 Met Ser Ser Pro Thr Pro Arg Ala Met Val Leu Thr Lys Gln Arg
 65 70 75 80
 Pro Ser Gln Thr Gln Ser Cys Gly Pro Arg Val Ser Arg Arg Ala Asp
 85 90 95
 Asn

<210> 1385
 <211> 210
 <212> DNA
 <213> Homo sapiens

<400> 1385
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 120
 gtggcgtgtg tgcattggtgt gtgcacgtgt gcactgtgtg tgggggtgtat gncattggtg
 180
 gtgcacatat gcactggggg gtgtgtatgc
 210

<210> 1386
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 1386
 Thr Arg Ala Leu Gly Val Cys Met Val Thr Tyr Thr Cys Ala Leu Cys
 1 5 10 15
 Val Val Cys Met Xaa Trp Cys Val His Val Cys Xaa Cys Val Cys Met
 20 25 30
 Val Met Cys Thr Cys Ala Leu Cys Val Ala Cys Met His Gly Val Cys

```

          35              40              45
r Cys Ala Leu Cys Val Gly Cys Met Xaa Trp Trp Val His Ile Cys
          50              55              60
Thr Gly Gly Cys Val Cys
65              70

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<210> 1387
 <211> 521
 <212> DNA
 <213> Homo sapiens

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<400> 1387
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120
gccggtgagg acgaaggcgt agttgccgcc gatggcagct ccgacagcac cgccggcgat
180
ggcggcaagg agtccgaaga cgaagactcc gatagagggtg gtgaacatcg gtgttccttt
240
gtgagggcgg ggtatcccgc gatctgtcat ccgcacgcag cgacgggtgc ggcattttct
300
ggacatccct aggcgttgac ccaggggtgg ggtggttcag acgtgtgccg gcgcacgtct
360
gaaccacccg gtatcagcag gtgccagggg cggattcccc agcacctgac tcatatgcgt
420
cgatgagatc gatgttgccc ttggagtggg aactcgggtc gaaggtgtac ccgatgaact
480
cgtgggctaa gcgacgggcg agttcgcgac cgatgacgcg t
521

```

<210> 1388
 <211> 103
 <212> PRT
 <213> Homo sapiens

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<400> 1388
Gly Arg Asn Ser Thr Ser Glu Gly Asp Val Arg Ala His Glu Gly Thr
1      5      10      15
Lys Gly Gln Val Val Gln Ala Glu Gly Val Ser Gly Cys Gly Lys His
20     25     30
Ser Pro Gly Gly Gln His Thr Glu Ala Gly Glu Asp Glu Gly Val Val
35     40     45
Ala Ala Asp Gly Ser Ser Asp Ser Thr Ala Gly Asp Gly Gly Lys Glu
50     55     60
Ser Glu Asp Glu Asp Ser Asp Arg Gly Gly Glu His Arg Cys Ser Phe
65     70     75     80
Val Arg Ala Gly Tyr Pro Ala Ile Cys His Pro His Ala Ala Thr Gly
85     90     95
Ala Ala Phe Ser Gly His Pro
100

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<210> 1389
 <211> 4013

<212> DNA

<213> Homo sapiens

<400> 1389

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120
actgccatgc acaccgctc cacagctgcc cccatcccca tcttgccctga gagaggagtt
180
tccctcttcc cctatggggc agacgccggg gacctggagt tcgtcaggag gacctgggac
240
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300
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360
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420
ccgttctggg acgatgctga cttctccact ggtcggggga ccacatttta tcaggaatac
480
gagacgttct atggtgaaca cagcctgcta gtccagcagg ccgagtcttg gattagaaag
540
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600
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660
gacgggagca ggtcctatgc cctgtttctc taccagagcg gtgggatgca gtgggacgtg
720
gccagcgct caggcaaccg ggtgctcatg ggcttctcta gtggagatgg ctatttcgaa
780
aacagccac tgatgtccca gccagtgtgg gagaggatc gccctgatag attcctgaat
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1020
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1080
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1260
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1380
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1440
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2340
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2700
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2760
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3120

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 3240
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 3660
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<210> 1390

<211> 1156

<212> PRT

<213> Homo sapiens

<400> 1390

Pro	Leu	Lys	Met	Glu	Thr	Ser	Gly	Met	Thr	Thr	Pro	Ser	Leu	Lys	Thr
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Asp	Gly	Gly	Arg	Arg	Thr	Ala	Thr	Ser	Pro	Pro	Pro	Thr	Thr	Ser	Gln
			20					25					30		
Thr	Ile	Ile	Ser	Thr	Ile	Pro	Ser	Thr	Ala	Met	His	Thr	Arg	Ser	Thr
			35				40				45				
Ala	Ala	Pro	Ile	Pro	Ile	Leu	Pro	Glu	Arg	Gly	Val	Ser	Leu	Phe	Pro
			50			55					60				
Tyr	Gly	Ala	Asp	Ala	Gly	Asp	Leu	Glu	Phe	Val	Arg	Arg	Thr	Val	Asp
65					70				75					80	
Phe	Thr	Ser	Pro	Leu	Phe	Lys	Pro	Ala	Thr	Gly	Phe	Pro	Leu	Gly	Ser
			85					90						95	
Ser	Leu	Arg	Asp	Ser	Leu	Tyr	Phe	Thr	Asp	Asn	Gly	Gln	Ile	Ile	Phe
			100					105					110		
Pro	Glu	Ser	Asp	Tyr	Gln	Ile	Phe	Ser	Tyr	Pro	Asn	Pro	Leu	Pro	Thr
			115				120					125			
Gly	Phe	Thr	Gly	Arg	Asp	Pro	Val	Ala	Leu	Val	Ala	Pro	Phe	Trp	Asp

130 135 140
 Asp Ala Asp Phe Ser Thr Gly Arg Gly Thr Thr Phe Tyr Gln Glu Tyr
 145 150 155 160
 Glu Thr Phe Tyr Gly Glu His Ser Leu Leu Val Gln Gln Ala Glu Ser
 165 170 175
 Trp Ile Arg Lys Ile Thr Asn Asn Gly Gly Tyr Lys Ala Arg Trp Ala
 180 185 190
 Leu Lys Val Thr Trp Val Asn Ala His Ala Tyr Pro Ala Gln Trp Thr
 195 200 205
 Leu Gly Ser Asn Thr Tyr Gln Ala Ile Leu Ser Thr Asp Gly Ser Arg
 210 215 220
 Ser Tyr Ala Leu Phe Leu Tyr Gln Ser Gly Gly Met Gln Trp Asp Val
 225 230 235 240
 Ala Gln Arg Ser Gly Asn Pro Val Leu Met Gly Phe Ser Ser Gly Asp
 245 250 255
 Gly Tyr Phe Glu Asn Ser Pro Leu Met Ser Gln Pro Val Trp Glu Arg
 260 265 270
 Tyr Arg Pro Asp Arg Phe Leu Asn Ser Asn Ser Gly Leu Gln Gly Leu
 275 280 285
 Gln Phe Tyr Arg Leu His Arg Glu Glu Arg Pro Asn Tyr Arg Leu Glu
 290 295 300
 Cys Leu Gln Trp Leu Lys Ser Gln Pro Arg Trp Pro Ser Trp Gly Trp
 305 310 315 320
 Asn Gln Val Ser Cys Pro Cys Ser Trp Gln Gln Gly Arg Arg Asp Leu
 325 330 335
 Arg Phe Gln Pro Val Ser Ile Gly Arg Trp Gly Leu Gly Ser Arg Gln
 340 345 350
 Leu Cys Ser Phe Thr Ser Trp Arg Gly Gly Val Cys Cys Ser Tyr Gly
 355 360 365
 Pro Trp Gly Glu Phe Arg Glu Gly Trp His Val Gln Arg Pro Trp Gln
 370 375 380
 Leu Ala Gln Glu Leu Glu Pro Gln Ser Trp Cys Cys Arg Trp Asn Asp
 385 390 395 400
 Lys Pro Tyr Leu Cys Ala Leu Tyr Gln Gln Arg Arg Pro His Val Gly
 405 410 415
 Cys Ala Thr Tyr Arg Pro Pro Gln Pro Ala Trp Met Phe Gly Asp Pro
 420 425 430
 His Ile Thr Thr Leu Asp Gly Val Ser Tyr Thr Phe Asn Gly Leu Gly
 435 440 445
 Asp Phe Leu Leu Val Gly Ala Gln Asp Gly Asn Ser Ser Phe Leu Leu
 450 455 460
 Gln Gly Arg Thr Ala Gln Thr Gly Ser Ala Gln Ala Thr Asn Phe Ile
 465 470 475 480
 Ala Phe Ala Ala Gln Tyr Arg Ser Ser Ser Leu Gly Pro Val Thr Val
 485 490 495
 Gln Trp Leu Leu Glu Pro His Asp Ala Ile Arg Val Leu Leu Asp Asn
 500 505 510
 Gln Thr Val Thr Phe Gln Pro Asp His Glu Asp Gly Gly Gly Gln Glu
 515 520 525
 Thr Phe Asn Ala Thr Gly Val Leu Leu Ser Arg Asn Gly Ser Glu Val
 530 535 540
 Ser Ala Ser Phe Asp Gly Trp Ala Thr Val Ser Val Ile Ala Leu Ser
 545 550 555 560
 Asn Ile Leu His Ala Ser Ala Ser Leu Pro Pro Glu Tyr Gln Asn Arg

1185

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          995                1000                1005
Pro Arg Arg Ser Glu Glu Pro Arg Asn Asp Val Val Phe Gln Pro Ile
    1010                1015                1020
Ser Gly Glu Asp Val Arg Asp Val Thr Ala Leu Asn Val Ser Thr Leu
1025                1030                1035                1040
Lys Ala Tyr Phe Arg Cys Asp Gly Tyr Lys Gly Tyr Asp Leu Val Tyr
          1045                1050                1055
Ser Pro Gln Ser Gly Phe Thr Cys Val Ser Pro Cys Ser Arg Gly Tyr
          1060                1065                1070
Cys Asp His Gly Gly Gln Cys Gln His Leu Pro Ser Gly Pro Arg Cys
    1075                1080                1085
Ser Cys Val Ser Phe Ser Ile Tyr Thr Ala Trp Gly Glu His Cys Glu
    1090                1095                1100
His Leu Ser Met Lys Leu Asp Ala Phe Phe Gly Ile Phe Phe Gly Ala
1105                1110                1115                1120
Leu Gly Gly Leu Leu Leu Leu Gly Val Gly Thr Phe Val Val Leu Arg
          1125                1130                1135
Phe Trp Gly Cys Ser Gly Ala Arg Phe Ser Tyr Phe Leu Asn Ser Ala
          1140                1145                1150
Glu Ala Leu Pro
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<210> 1391
 <211> 481
 <212> DNA
 <213> Homo sapiens

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<400> 1391
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120
ctggcgccgc gcaaggtgct cggtaaaagc aagcagaagg ccgaggagct ggcgggtccgg
180
caactgaccc acgtgggcct gagcgacaag ctcaagacct ttcccgcana gctttccggc
240
ggccagcaac agcgcattggc gattgcccgg gccctggcca tgtcgccgga ctacatgctg
300
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360
cgcatgctcg ccgaagacgg catgaccatg gtcctggtga cccatgaaat ccgctttgcc
420
cgcgatgtgt ccgatcgcgt ggcgttcttt cgcaacggcc tgggtgcacga gatcggcgcg
480
c
481

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<210> 1392
 <211> 160
 <212> PRT
 <213> Homo sapiens

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<400> 1392
Val Asp Gly Ile Glu Val His Asp Lys Ala Thr Asp Leu Asn Arg Leu

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Arg Gln Lys Ile Gly Ile Val Phe Gln Gln Trp Asn Ala Phe Pro His
      20             25             30
Leu Thr Val Leu Glu Asn Val Met Leu Ala Pro Arg Lys Val Leu Gly
      35             40             45
Lys Ser Lys Gln Lys Ala Glu Glu Leu Ala Val Arg Gln Leu Thr His
      50             55             60
Val Gly Leu Ser Asp Lys Leu Lys Thr Phe Pro Ala Xaa Leu Ser Gly
      65             70             75             80
Gly Gln Gln Gln Arg Met Ala Ile Ala Arg Ala Leu Ala Met Ser Pro
      85             90             95
Asp Tyr Met Leu Phe Asp Glu Ala Thr Ser Ala Leu Asp Pro Gln Leu
      100            105            110
Val Gly Glu Val Leu Asp Thr Met Arg Met Leu Ala Glu Asp Gly Met
      115            120            125
Thr Met Val Leu Val Thr His Glu Ile Arg Phe Ala Arg Asp Val Ser
      130            135            140
Asp Arg Val Ala Phe Phe Arg Asn Gly Leu Val His Glu Ile Gly Ala
      145            150            155            160

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<210> 1393

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1393

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cgccgcgcat cgccgcgggc cttgtgggat atggccatta ctgaggtgct ggccggctac
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120
tgggcccttc tgcgccgtca gggcatcagg tggcccgtcg cancggtgga gcgcctcatg
180
cgggacaacc ggtggcgtgg ggtgaccgcg cgtaagaagg ttncgcacca ccatcgctga
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cccggctgcc gggcgagccc cggatctggt ggaccgccag ttccgcgtcg aggcgcccac
300
caagttgct
309

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<210> 1394

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1394

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Arg Pro Pro Ser Ala Arg Ala Leu Trp Asp Met Ala Ile Thr Glu Val
      1             5             10             15
Leu Ala Gly Tyr Tyr Glu Pro Asp Glu His Gly His Arg Lys Pro Glu
      20             25             30
Ser Leu Tyr Gly Ala Val Lys Met Trp Ala Leu Leu Arg Arg Gln Gly
      35             40             45
Ile Arg Trp Pro Ala Ala Xaa Val Glu Arg Leu Met Arg Asp Asn Arg
      50             55             60
Trp Arg Gly Val Thr Arg Arg Lys Lys Val Xaa His His His Arg

```

65

70

75

<210> 1395
 <211> 347
 <212> DNA
 <213> Homo sapiens

<400> 1395
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 tatgacggta gtcgtgggcg aaacggtgct tgctgtttgtg cgccgtcaac gtcgaagagc
 120
 ccagattctt aaaggcggtc gcgatgttgc ccgggcgaca agggccttgg ctggacgggt
 180
 gtcggtgggg gagatccctt cagttgcact agagcacgtg gccgatgacg tggaggtatt
 240
 ggctcaggtc aggcgggctc atgcagtggg cggaagcgtt tccgacgcc tcattgccac
 300
 ctcccgcaa ccagggatgg ctggtctggt gccactagcc caccgct
 347

<210> 1396
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1396
 Met Thr Val Val Val Gly Glu Thr Val Leu Val Val Val Arg Arg Gln
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 Arg Arg Arg Ala Gln Ile Leu Lys Gly Gly Arg Asp Val Ala Arg Ala
 20 25 30
 Thr Arg Ala Leu Ala Gly Arg Val Ser Val Gly Glu Ile Pro Ser Val
 35 40 45
 Ala Leu Glu His Val Ala Asp Asp Val Glu Val Leu Ala Gln Ala Arg
 50 55 60
 Arg Ala His Ala Val Gly Gly Ser Val Ser Asp Ala Leu Ile Ala Thr
 65 70 75 80
 Ser Arg Gln Pro Gly Met Ala Gly Leu Val Pro Leu Ala His Ala
 85 90 95

<210> 1397
 <211> 308
 <212> DNA
 <213> Homo sapiens

<400> 1397
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 ctggcccgcg tcgcgattgc cgccactatc cattctccgg aacgcgcgca agacatggtc
 120
 aaccgcttga gcaaacgcga agaaggcttc acgcaatggg tacgtgccgc acaggacgat
 180
 ggtcgactgt cctgcagcga cccggcggtc gctgcccacc agatacaaag cctgctcaag
 240

gcgttcgcct tttggccgca aatcaccttg ggccagccgg tgctggatgc cgccagccag
300

gccaacgt

308

<210> 1398

<211> 93

<212> PRT

<213> Homo sapiens

<400> 1398

Met	Gln	Met	Met	Ser	Asp	Thr	Asn	Phe	Leu	Asp	Leu	Ala	Arg	Val	Ala
1				5				10				15			
Ile	Ala	Ala	Thr	Ile	His	Ser	Pro	Glu	Arg	Ala	Gln	Asp	Met	Val	Asn
			20				25				30				
Arg	Leu	Ser	Lys	Arg	Glu	Glu	Gly	Phe	Thr	Gln	Trp	Val	Arg	Ala	Ala
		35				40					45				
Gln	Asp	Asp	Gly	Arg	Leu	Ser	Cys	Ser	Asp	Pro	Ala	Phe	Ala	Ala	His
	50				55					60					
Gln	Ile	Gln	Ser	Leu	Leu	Lys	Ala	Phe	Ala	Phe	Trp	Pro	Gln	Ile	Thr
65				70				75						80	
Leu	Gly	Gln	Pro	Val	Leu	Asp	Ala	Ala	Ser	Gln	Ala	Asn			
				85				90							

<210> 1399

<211> 539

<212> DNA

<213> Homo sapiens

<400> 1399

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120
ttagatattt taacttcac agtactatct gtagtaggag gctgatttta ctaaaattag
180
ataattatat acatctgttc ctattccttt ggtaggacct ttaagaaagt catgctgaat
240
ctgagaatgc caggacattt cacgtgggat gaatgtagga tattcattta cacatcgctg
300
cacagacagc ctctatataa cccaccctgt tggggatttg aattttttct tttcccgcct
360
tactttttaa tcttgatcatg taatttcaac acataatttg tggcacttta gtttttttac
420
cctttatagt ttaataactt atacatgtac atgcttaaaa tgtcaaaca tacaaatggg
480
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539

<210> 1400

<211> 90

<212> PRT

<213> Homo sapiens

<400> 1400

```

Met Asn Val Gly Tyr Ser Phe Thr His Arg Cys Thr Asp Ser Leu Tyr
 1           5           10           15
Ile Thr His Pro Val Gly Val Leu Asn Phe Phe Phe Ser Arg Pro Thr
          20           25           30
Phe Lys Ser Cys His Val Ile Ser Thr His Asn Leu Trp His Phe Ser
          35           40           45
Phe Phe Thr Leu Tyr Ser Leu Ile Thr Tyr Thr Cys Thr Cys Leu Lys
          50           55           60
Cys Gln Thr Ile Gln Met Gly Thr Lys Lys Ile Ala Ser Pro Ser Val
65           70           75           80
Asn Pro Ser Phe Cys Ser Pro Leu His Ala
          85           90

```

<210> 1401

<211> 653

<212> DNA

<213> Homo sapiens

<400> 1401

```

ttcgaggggt cacttggtgact caagcttcgc gaagtccggg acctcggacg accgattttt
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cggctgtgca ccgtcacccgc aaggctggcg tgggttnnct catcacccgc gcggcgatgg
120
ncattgggggt ttgatggccg cgtttccttg ctgctgggcg cgatcctcat cgtcacccgc
180
ccaacggtga ttaaccgat cctgcgtcag ttgcgtccta cccggcgagt gagtgtcttg
240
ttgaggtggg aaggaatcgt cgtcgatccg ctccggcgcca tcctggcatt actggtgtat
300
cagggcataa ccagcatcga ccgatcttcc atcggacaag gcgtcttgaa tctggggctc
360
accctattgg tcgggctgct ctccgctggc cccatcgggt ggatcggtcac cgcgatgatg
420
aaacggcacc tcatcccga ctccctacaa ggcgtgattt tcgttgggggt cgccgttgga
480
acgtgtgttg gcgctaactg cattcgggag gaatcgggccc tggtcgccgt tacgatgttc
540
ggcatctacc tggcgaacca gcgcaacctc gagcttgagc ccgtcatcga gttcaaggaa
600
cacctgcagg tgctcctcgt tggcgtccta ttcacatgc ttgcaggacg cgt
653

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<210> 1402

<211> 217

<212> PRT

<213> Homo sapiens

<400> 1402

```

Phe Glu Gly Ser Leu Gly Leu Lys Leu Arg Glu Val Arg Asp Leu Gly
 1           5           10           15
Arg Pro Ile Phe Arg Leu Cys Thr Val Thr Ala Arg Leu Ala Trp Val
          20           25           30
Xaa Ser Ser Pro Ala Arg Arg Trp Xaa Leu Gly Phe Asp Gly Arg Val

```

```

          35          40          45
Ser Leu Leu Leu Gly Ala Ile Leu Ile Val Thr Gly Pro Thr Val Ile
   50          55          60
Asn Pro Ile Leu Arg Gln Leu Arg Pro Thr Arg Arg Val Ser Ala Leu
   65          70          75          80
Leu Arg Trp Glu Gly Ile Val Val Asp Pro Leu Gly Ala Ile Leu Ala
          85          90          95
Leu Leu Val Tyr Gln Ala Ile Thr Ser Ile Asp Arg Ser Ser Ile Gly
          100          105          110
Gln Gly Val Leu Asn Leu Gly Leu Thr Leu Leu Val Gly Leu Leu Phe
          115          120          125
Ala Gly Pro Ile Gly Trp Ile Val Thr Ala Met Met Lys Arg His Leu
          130          135          140
Ile Pro Asp Phe Leu Gln Gly Val Ile Phe Val Gly Val Ala Val Gly
          145          150          155          160
Thr Cys Val Gly Ala Asn Val Ile Arg Glu Glu Ser Gly Leu Val Ala
          165          170          175
Val Thr Met Leu Gly Ile Tyr Leu Ala Asn Gln Arg Asn Leu Glu Leu
          180          185          190
Glu Pro Val Ile Glu Phe Lys Glu His Leu Gln Val Leu Leu Val Gly
          195          200          205
Val Leu Phe Ile Met Leu Ala Gly Arg
          210          215

```

<210> 1403
 <211> 393
 <212> DNA
 <213> Homo sapiens

```

<400> 1403
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120
tggtccttgg ggtcatgac tccacaagtt gggcatatct cctttatcag ctgcttgcca
180
gagcttcctt ccatctcttt cattatgacc tcaaaggag atggcacgct agtcttggac
240
gtcctagctt gtttccgaag ggctgtcaga gcctcctgt taccatttct tatcttatca
300
ttttccacca actgatgtct agccagaaga actttttctg catcagtcct aatatcaacc
360
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393

```

<210> 1404
 <211> 127
 <212> PRT
 <213> Homo sapiens

```

<400> 1404
Met Lys Gln Leu Gln Glu Ala Leu Val Asp Ile Glu Thr Asp Ala Glu
1          5          10          15
Lys Val Leu Leu Ala Arg His Gln Leu Val Glu Asn Asp Lys Ile Arg

```

```

                20                25                30
Asn Gly Asn Arg Glu Ala Leu Thr Ala Leu Arg Lys Gln Ala Arg Thr
      35                40                45
Ser Lys Thr Ser Val Pro Ser Pro Phe Glu Val Ile Met Lys Glu Met
      50                55                60
Glu Gly Ser Ser Gly Lys Gln Leu Ile Lys Glu Ile Cys Pro Thr Cys
65                70                75                80
Gly Asp His Asp Pro Lys Glu His Thr Trp Leu Met Phe Pro Gly Ser
      85                90                95
Asp Met Phe Ala Arg Val Pro Phe His Val Ala His Thr Val Val Glu
      100                105                110
Lys Asp Gln Glu Arg Leu Asp Leu Asp Thr Lys Lys Leu Gln Ser
      115                120                125

```

<210> 1405

<211> 421

<212> DNA

<213> Homo sapiens

<400> 1405

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nnccgactgc acaaggccct gggcatcgaa ctgcccggcg cactgcaggt catcgtaaaa
60
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120
gaagagttcg ccgccgagca aaacctgcgt gccgccctgg gcgagttgca tatccaggtc
180
gtcaacgtca gcggtggcca gcagatcctc gaactcagcg gccgaacgt gcgcgacgtg
240
ctgatgaaat ccaccagcta cgacgtacac cccaacaact tcccggtggg caaggcgggtg
300
ggcacgggtg tcgccaagtc gcaactgggtg atccgccata ccgccgaaga cacctgggaa
360
ctgctgatcc gtcgcagctt ctcggattac tggtggctgt ggttgcagga cgcggctgca
420
t
421

```

<210> 1406

<211> 140

<212> PRT

<213> Homo sapiens

<400> 1406

```

Xaa Arg Leu His Lys Ala Leu Gly Ile Glu Leu Pro Gly Ala Leu Gln
1                5                10                15
Val Ile Val Lys Gly Glu Thr Ser Leu Gln Trp Leu Gly Pro Asp Glu
      20                25                30
Trp Leu Leu Ile Val Pro Ser Gly Glu Glu Phe Ala Ala Glu Gln Asn
      35                40                45
Leu Arg Ala Ala Leu Gly Glu Leu His Ile Gln Val Val Asn Val Ser
      50                55                60
Gly Gly Gln Gln Ile Leu Glu Leu Ser Gly Pro Asn Val Arg Asp Val
65                70                75                80
Leu Met Lys Ser Thr Ser Tyr Asp Val His Pro Asn Asn Phe Pro Val

```

```
<210> 1408
<211> 335
<212> PRT
<213> Homo sapiens
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<400> 1408

```

Xaa Gly Arg Glu Lys Leu Glu Leu Val Leu Ser Asn Leu Gln Ala Asp
 1           5           10           15
Val Leu Glu Leu Leu Glu Phe Val Tyr Thr Gly Ser Leu Val Ile
      20           25           30
Asp Ser Ala Asn Ala Lys Thr Leu Leu Glu Ala Ala Ser Lys Phe Gln
      35           40           45
Phe His Thr Phe Cys Lys Val Cys Val Ser Phe Leu Glu Lys Gln Leu
      50           55           60
Thr Ala Ser Asn Cys Leu Gly Val Ala Ala Met Ala Glu Ala Met Gln
65           70           75           80
Cys Ser Glu Leu Tyr His Xaa Ala Lys Ala Phe Ala Leu Gln Ile Phe
      85           90           95
Pro Glu Val Ala Ala Gln Glu Glu Ile Leu Ser Ile Ser Lys Asp Asp
      100           105           110
Phe Ile Ala Tyr Val Ser Asn Asp Ser Leu Asn Thr Lys Ala Glu Glu
      115           120           125
Leu Val Tyr Glu Thr Val Ile Lys Trp Ile Lys Lys Asp Pro Ala Thr
      130           135           140
Arg Thr Gln Tyr Ala Ala Glu Leu Leu Ala Val Val Arg Leu Pro Phe
145           150           155           160
Ile His Pro Ser Tyr Leu Leu Asn Val Val Asp Asn Glu Glu Leu Ile
      165           170           175
Lys Ser Ser Glu Ala Cys Arg Asp Leu Val Asn Glu Ala Lys Arg Tyr
      180           185           190
His Met Leu Pro His Ala Arg Gln Glu Met Gln Thr Pro Arg Thr Arg
      195           200           205
Pro Arg Leu Ser Ala Gly Val Ala Glu Val Ile Val Leu Val Gly Gly
      210           215           220
Arg Gln Met Val Gly Met Thr Gln Arg Ser Leu Val Ala Val Thr Cys
225           230           235           240
Trp Asn Pro Gln Asn Asn Lys Trp Tyr Pro Leu Ala Ser Val Pro Phe
      245           250           255
Leu Gly Pro Gly Phe Phe Ser Val Val Ser Ala Gly Ala Asn Ile Tyr
      260           265           270
Leu Ser Gly Gly Met Glu Ser Gly Val Pro Leu Ala Asp Val Trp Cys
      275           280           285
Tyr Met Ser Leu Leu Asp Asn Trp Asn Leu Val Ser Arg Met Pro Val
      290           295           300
Pro Arg Cys Arg Pro His Ser Leu Val Tyr Asp Gly Lys Ile Tyr Thr
305           310           315           320
Leu Gly Gly Leu Gly Val Ala Gly Asn Val Asp His Val Glu Arg
      325           330           335

```

<210> 1409

<211> 279

<212> DNA

<213> Homo sapiens

<400> 1409

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nnnatgaagt tcttggtttt ttcagaaaaa cgcgcttttt gctatgctgg cgcggcgcg
60
gcacgagata gcaccatgca actgatcgat atcggcgtca acctgaccaa cagcagtttc
120

```

cacgaccaac aggccgcaat cgctcgagcgc gcgctggagg ccggcggttac gcaaattgctg
 180
 ctgacaggca ccagcctggc ggtcagcgaa caagccctgg aactgtgccca tcaactggat
 240
 gcaagcggcg cccacctgtt cgccacggcc ggcgtgcac
 279

<210> 1410
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 1410
 Xaa Met Lys Phe Leu Val Phe Ser Glu Lys Arg Ala Phe Cys Tyr Ala
 1 5 10 15
 Gly Arg Pro Ala Ala Arg Asp Ser Thr Met Gln Leu Ile Asp Ile Gly
 20 25 30
 Val Asn Leu Thr Asn Ser Ser Phe His Asp Gln Gln Ala Ala Ile Val
 35 40 45
 Glu Arg Ala Leu Glu Ala Gly Val Thr Gln Met Leu Leu Thr Gly Thr
 50 55 60
 Ser Leu Ala Val Ser Glu Gln Ala Leu Glu Leu Cys His Gln Leu Asp
 65 70 75 80
 Ala Ser Gly Ala His Leu Phe Ala Thr Ala Gly Val His
 85 90

<210> 1411
 <211> 321
 <212> DNA
 <213> Homo sapiens

<400> 1411
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 tttcgtgaat ggtagaaat ggaagagcct agctgggctc atgtcgatta ccctaaaatt
 120
 gattttcaat ctatttctta ctattccgcg ccaaaaagca tgaaggataa gcctaagtcg
 180
 ttagacgaag tcgatcctga attgttacgt acttatgaaa aactgggcat tccttcata
 240
 gaacagcaaa tgcttgctgg tatcgccgta gatgctgtct ttgactcagt gtctgtcgtt
 300
 actacttttc gtcaaaagct t
 321

<210> 1412
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 1412
 Xaa Arg Ile Ser Gly Met Lys Asn Glu Pro Glu Trp Met Leu Glu Trp
 1 5 10 15
 Arg Leu Ser Ala Phe Arg Glu Trp Leu Glu Met Glu Glu Pro Ser Trp

```

                20                25                30
Ala His Val Asp Tyr Pro Lys Ile Asp Phe Gln Ser Ile Ser Tyr Tyr
                35                40                45
Ser Ala Pro Lys Ser Met Lys Asp Lys Pro Lys Ser Leu Asp Glu Val
                50                55                60
Asp Pro Glu Leu Leu Arg Thr Tyr Glu Lys Leu Gly Ile Pro Leu Ile
        65                70                75                80
Glu Gln Gln Met Leu Ala Gly Ile Ala Val Asp Ala Val Phe Asp Ser
                85                90                95
Val Ser Val Val Thr Thr Phe Arg Gln Lys Leu
                100                105

```

<210> 1413
 <211> 385
 <212> DNA
 <213> Homo sapiens

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<400> 1413
atgacccatg acgtcagcga agccgtggcg attgccgacc gggatgaccc gatcgaagac
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ggcgaaatcg gcctcgacct gatcatcgac ctgccacgct cgcgtgcccg tggttcacac
120
cgcttgggccg cgttggaagc cgaagtgata aaccgtgtgc tgcataacc cngcagaag
180
ccggaacccg aacatgttaa accgctgcct acgaaattgc gttgggctca ataactcata
240
gaggaacacc atcatgacta taaaagccat caacgtgcgt aaccagttaa aaggcaccat
300
caaggaaatc gtagtcggca acgtgctctc ggaaatcgac gtgcagaccg cctccgggat
360
cgtcacttct gtgatcacta cgcgt
385

```

<210> 1414
 <211> 55
 <212> PRT
 <213> Homo sapiens

```

<400> 1414
Met Thr His Asp Val Ser Glu Ala Val Ala Ile Ala Asp Arg Val Ile
1          5          10          15
Leu Ile Glu Asp Gly Glu Ile Gly Leu Asp Leu Ile Ile Asp Leu Pro
20          25          30
Arg Pro Arg Ala Arg Gly Ser His Arg Leu Ala Ala Leu Glu Ala Glu
35          40          45
Val Ile Asn Arg Val Leu Ser
50          55

```

<210> 1415
 <211> 420
 <212> DNA
 <213> Homo sapiens

<400> 1415

acgcgtgcag gcaaacatta atatgagtta acaccacaca ggatgagact gtttgtacct
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gtaactgtcc ttgtcatctg tcttgcagat ttagaagagg aatcagaaaag ctgggacaac
120
tctgaggctg aagaggagga gaaagcccct gtgttgccag agagtacaga agggcgaggag
180
ctgacccagg gcccggcaga gtccctcctct ctctcaggct gtgggagctg gcagccccgg
240
aagctgccag tcttcaagtc cctccggcac atgaggcagg tccctgggtgc cccttctttc
300
cgcattgctgg cctggcacgt tctcatgggg aaccagggtga tctggaaaag cagagacgtg
360
gacctcgtcc agtcagcttt tgaagtactt cgggtgagaa catcttttcc ttaggtgtgc
420

<210> 1416

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1416

Met	Arg	Leu	Phe	Val	Pro	Val	Thr	Val	Leu	Val	Ile	Cys	Leu	Ala	Asp
1			5						10					15	
Leu	Glu	Glu	Glu	Ser	Glu	Ser	Trp	Asp	Asn	Ser	Glu	Ala	Glu	Glu	Glu
		20						25					30		
Glu	Lys	Ala	Pro	Val	Leu	Pro	Glu	Ser	Thr	Glu	Gly	Arg	Glu	Leu	Thr
		35					40					45			
Gln	Gly	Pro	Ala	Glu	Ser	Ser	Ser	Leu	Ser	Gly	Cys	Gly	Ser	Trp	Gln
		50				55					60				
Pro	Arg	Lys	Leu	Pro	Val	Phe	Lys	Ser	Leu	Arg	His	Met	Arg	Gln	Val
65					70					75				80	
Leu	Gly	Ala	Pro	Ser	Phe	Arg	Met	Leu	Ala	Trp	His	Val	Leu	Met	Gly
			85						90					95	
Asn	Gln	Val	Ile	Trp	Lys	Ser	Arg	Asp	Val	Asp	Leu	Val	Gln	Ser	Ala
		100						105					110		
Phe	Glu	Val	Leu	Arg	Val	Arg	Thr	Ser	Phe	Pro					
		115					120								

<210> 1417

<211> 5058

<212> DNA

<213> Homo sapiens

<400> 1417

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120
taggagggtg gccacccat ttccagtgtg acctgttccc attcccccat gtctcctccc
180
atccctcccg ccactcagct caggctgatg agaagcagag caacgggtgt atcgggtgtt
240
tctttcctgg tgggtagtg ggggtgggct gaggagagaa aagggtgatt agcgtggggc
300

cccgccctct tttgtcctct tcccagggtc cctggccctt tcggagaaac gcacttggtt
360
cgggccagcc gcctgagggg acgggctcac gtctgtcctt cacactgcag ctgctggggc
420
gtggagcttc cccagggagc cagggggact tttgccgcag ccatgaaggg ggcacgtgg
480
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540
ccaggaacca cagaggacac attaataact ggaagtaaaa ctctgcccc agtcacctca
600
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660
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720
aaagctcaaa ccgacaccct cagcgagatg atgacatcaa ctcttttttc ttccccaagt
780
gtacacaatg tgatggagac tgttacgcag gagacagctc ctccagatga aatgaccaca
840
tcatttcctt ccagtgtcac caacacactc atgatgacat caaagactat aacaatgaca
900
acctccacag actccactct tggaaacaca gaagagacat caacagcagg aactgaaagt
960
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1020
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1080
agcacgcaga ccaccagga atctcaaacc agcaccctaa cacacagaac cacttcaact
1140
ccttctttct ctccaagtgt acacaatgtg acagggactg tttctcagaa gacatctctt
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1260
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1320
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1440
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1560
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1920

ctacatgaaa caacaacatg gccttctctca ttctccagca aaggccacac aacttgggtca
1980
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2040
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2100
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2160
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2460
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2700
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2820
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2880
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2940
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3060
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3120
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3180
gccgccattt cccgatggc ccagactcag aggacaagaa ccagcagagg gtctgacact
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3300
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3360
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3420
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3540

accacgcctc ttctgtcac tagcccttcc tcagcatcct caggtcacgc cacctctctt
3600
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3660
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3720
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3780
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3840
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3900
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3960
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4140
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4260
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4320
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4380
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4440
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4500
gccacctctc ttctgtcac cgacccttcc tcagcatcca caggtgacac caccctctt
4560
cctgtcacgc acacttctc agtatccaca ggtcacgcca cctctcttcc tgtcaccgac
4620
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4680
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4740
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4800
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4860
ccttctcag catccacaag tcacgccacc tcttctcttg tcaccgacac ttcttcagca
4920
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4980
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5040
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5058

<210> 1418

<211> 1532
 <212> PRT
 <213> Homo sapiens

<400> 1418

```

Met Lys Gly Ala Arg Trp Arg Arg Val Pro Trp Val Ser Leu Ser Cys
 1           5           10           15
Leu Cys Leu Cys Leu Leu Pro His Val Val Pro Gly Thr Thr Glu Asp
 20           25           30
Thr Leu Ile Thr Gly Ser Lys Thr Pro Ala Pro Val Thr Ser Thr Gly
 35           40           45
Ser Thr Thr Ala Thr Leu Glu Gly Gln Ser Thr Ala Ala Ser Ser Arg
 50           55           60
Thr Ser Asn Gln Asp Ile Ser Ala Ser Ser Gln Asn His Gln Thr Lys
 65           70           75           80
Ser Thr Glu Thr Thr Ser Lys Ala Gln Thr Asp Thr Leu Thr Gln Met
 85           90           95
Met Thr Ser Thr Leu Phe Ser Ser Pro Ser Val His Asn Val Met Glu
 100          105          110
Thr Val Thr Gln Glu Thr Ala Pro Pro Asp Glu Met Thr Thr Ser Phe
 115          120          125
Pro Ser Ser Val Thr Asn Thr Leu Met Met Thr Ser Lys Thr Ile Thr
 130          135          140
Met Thr Thr Ser Thr Asp Ser Thr Leu Gly Asn Thr Glu Glu Thr Ser
 145          150          155          160
Thr Ala Gly Thr Glu Ser Ser Thr Pro Val Thr Ser Ala Val Ser Ile
 165          170          175
Thr Ala Gly Gln Glu Gly Gln Ser Arg Lys Thr Ser Trp Arg Thr Ser
 180          185          190
Ile Gln Asp Thr Ser Ala Ser Ser Gln Asn His Trp Thr Arg Ser Thr
 195          200          205
Gln Thr Thr Arg Glu Ser Gln Thr Ser Thr Leu Thr His Arg Thr Thr
 210          215          220
Ser Thr Pro Ser Phe Ser Pro Ser Val His Asn Val Thr Gly Thr Val
 225          230          235          240
Ser Gln Lys Thr Ser Pro Ser Gly Glu Thr Ala Thr Ser Ser Leu Cys
 245          250          255
Ser Val Thr Asn Thr Ser Met Met Thr Ser Glu Lys Ile Thr Val Thr
 260          265          270
Thr Ser Thr Gly Ser Thr Leu Gly Asn Pro Gly Glu Thr Ser Ser Val
 275          280          285
Pro Val Thr Gly Ser Leu Met Pro Val Thr Ser Ala Ala Leu Val Thr
 290          295          300
Val Asp Pro Glu Gly Gln Ser Pro Ala Thr Phe Ser Arg Thr Ser Thr
 305          310          315          320
Gln Asp Thr Thr Ala Phe Ser Lys Asn His Gln Thr Gln Ser Val Glu
 325          330          335
Thr Thr Arg Val Ser Gln Ile Asn Thr Leu Asn Thr Leu Thr Pro Val
 340          345          350
Thr Thr Ser Thr Val Leu Ser Ser Pro Ser Gly Phe Asn Pro Ser Gly
 355          360          365
Thr Val Ser Gln Glu Thr Phe Pro Ser Gly Glu Thr Thr Ile Ser Ser
 370          375          380
Pro Ser Ser Val Ser Asn Thr Phe Leu Val Thr Ser Lys Val Phe Arg

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385          390          395          400
Met Pro Ile Ser Arg Asp Ser Thr Leu Gly Asn Thr Glu Glu Thr Ser
          405          410          415
Leu Ser Val Ser Gly Thr Ile Ser Ala Ile Thr Ser Lys Val Ser Thr
          420          425          430
Ile Trp Trp Ser Asp Thr Leu Ser Thr Ala Leu Ser Pro Ser Ser Leu
          435          440          445
Pro Pro Lys Ile Ser Thr Ala Phe His Thr Gln Gln Ser Glu Gly Ala
          450          455          460
Glu Thr Thr Gly Arg Pro His Glu Arg Ser Ser Phe Ser Pro Gly Val
465          470          475          480
Ser Gln Glu Ile Phe Thr Leu His Glu Thr Thr Trp Pro Ser Ser
          485          490          495
Phe Ser Ser Lys Gly His Thr Thr Trp Ser Gln Thr Glu Leu Pro Ser
          500          505          510
Thr Ser Thr Gly Ala Ala Thr Arg Leu Val Thr Gly Asn Pro Ser Thr
          515          520          525
Gly Ala Ala Gly Thr Ile Pro Arg Val Pro Ser Lys Val Ser Ala Ile
          530          535          540
Gly Glu Pro Gly Glu Pro Thr Thr Tyr Ser Ser His Ser Thr Thr Leu
545          550          555          560
Pro Lys Thr Thr Gly Ala Gly Ala Gln Thr Gln Trp Thr Gln Glu Thr
          565          570          575
Gly Thr Thr Gly Glu Ala Leu Leu Ser Ser Pro Ser Tyr Ser Val Thr
          580          585          590
Gln Met Ile Lys Thr Ala Thr Ser Pro Ser Ser Ser Pro Met Leu Asp
          595          600          605
Arg His Thr Ser Gln Gln Ile Thr Thr Ala Pro Ser Thr Asn His Ser
          610          615          620
Thr Ile His Ser Thr Ser Thr Ser Pro Gln Glu Ser Pro Ala Val Ser
625          630          635          640
Gln Arg Gly His Thr Gln Ala Pro Gln Thr Thr Gln Glu Ser Gln Thr
          645          650          655
Thr Arg Ser Val Ser Pro Met Thr Asp Thr Lys Thr Val Thr Thr Pro
          660          665          670
Gly Ser Ser Phe Thr Ala Ser Gly His Ser Pro Ser Glu Ile Val Pro
          675          680          685
Gln Asp Ala Pro Thr Ile Ser Ala Ala Thr Thr Phe Ala Pro Ala Pro
          690          695          700
Thr Gly Asp Gly His Thr Thr Gln Ala Pro Thr Thr Ala Leu Gln Ala
705          710          715          720
Thr Pro Ser Ser His Asp Ala Thr Leu Gly Pro Ser Gly Gly Thr Ser
          725          730          735
Leu Ser Lys Thr Gly Ala Leu Thr Leu Ala Asn Ser Val Val Ser Thr
          740          745          750
Pro Gly Gly Pro Glu Gly Gln Trp Thr Ser Ala Ser Ala Ser Thr Ser
          755          760          765
Pro Asp Thr Ala Ala Ala Met Thr His Thr His Gln Ala Glu Ser Thr
          770          775          780
Glu Ala Ser Gly Gln Thr Gln Thr Ser Glu Pro Ala Ser Ser Gly Ser
785          790          795          800
Arg Thr Thr Ser Ala Gly Thr Ala Thr Pro Ser Ser Ser Gly Ala Ser
          805          810          815
Gly Thr Thr Pro Ser Gly Ser Glu Gly Ile Ser Thr Ser Gly Glu Thr

```

1203

1250	1255	1260
Gly His Ala Thr Pro Leu His Val Thr Asp Ala Ser Ser Val Ser Thr		
1265	1270	1275
Gly Asp Thr Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Thr		1280
	1285	1290
Gly Asp Thr Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		1295
	1300	1305
Gly Asp Thr Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Val Ser Thr		1310
	1315	1320
Ser His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		1325
	1330	1335
Ser His Ala Thr Ser Leu Pro Val Thr Asp Pro Ser Ser Ala Ser Thr		1340
1345	1350	1355
Gly Asp Thr Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		1360
	1365	1370
Gly His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1375
	1380	1385
Gly Asp Thr Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1390
	1395	1400
Gly His Ala Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1405
	1410	1415
Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		1420
1425	1430	1435
Gly His Thr Thr Pro Leu His Val Thr Ser Pro Ser Ser Ala Ser Thr		1440
	1445	1450
Gly His Ala Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Thr		1455
	1460	1465
Ser His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1470
	1475	1480
Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		1485
	1490	1495
Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		1500
1505	1510	1515
Gly His Ala Thr Pro Leu Pro Val Thr Asp Thr Ser		1520
	1525	1530

<210> 1419

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1419

aaggctatgg gaattcaaaa gtatgtgttc tattccatcc acaactgtga caagcagcct
60

gaggttccct tgatggaaat caagtattgt actggtaaatt ttattcagga cagtgggtctg
120

gattatatca tcatccgttt gtgtgggttc atgcagggtc ttattgggca atatgctgtt
180

cctatactag aagagaagtc cgtctgggga actgatgctc caactcggat tgcttacatg
240

gatacccagg acgtagctcg actaacgttt atagctatgc ggaatgagaa ggccaacaag
300

aaactcatg

309

<210> 1420
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1420
 Lys Ala Met Gly Ile Gln Lys Tyr Val Phe Tyr Ser Ile His Asn Cys
 1 5 10 15
 Asp Lys Gln Pro Glu Val Pro Leu Met Glu Ile Lys Tyr Cys Thr Gly
 20 25 30
 Lys Phe Ile Gln Asp Ser Gly Leu Asp Tyr Ile Ile Ile Arg Leu Cys
 35 40 45
 Gly Phe Met Gln Gly Leu Ile Gly Gln Tyr Ala Val Pro Ile Leu Glu
 50 55 60
 Glu Lys Ser Val Trp Gly Thr Asp Ala Pro Thr Arg Ile Ala Tyr Met
 65 70 75 80
 Asp Thr Gln Asp Val Ala Arg Leu Thr Phe Ile Ala Met Arg Asn Glu
 85 90 95
 Lys Ala Asn Lys Lys Leu Met
 100

<210> 1421
 <211> 385
 <212> DNA
 <213> Homo sapiens

<400> 1421
 ccattggcggc atgggtggag agagaagctg gggagaagaa atgatgcaga gatctcgcca
 60
 ggccagggag ctgggctggg cagccaggag tagagaaaca acgctcccag aggaggggag
 120
 gatgttagag caaagccgag cccagctgct ggccaatgca tctgtgatgc ccattgagcag
 180
 ccaggatttc agctccgctc tacttcttga ctgctgcaga actcagcacc agctccagt
 240
 ccctcagagc cctgattttt cacaaaccga ctctccaag cctcccctgt gggcgggata
 300
 cacaagccag agtcgccttg tcacatctct tctctctcca ccaggtcatg ggcaaacctt
 360
 cctgacatac ttacgacat tacag
 385

<210> 1422
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1422
 Met Gly Gly Glu Arg Ser Trp Gly Glu Glu Met Met Gln Arg Ser Arg
 1 5 10 15
 Gln Ala Arg Glu Leu Gly Trp Ala Ala Arg Ser Arg Glu Thr Thr Leu
 20 25 30
 Pro Glu Glu Gly Arg Met Leu Glu Gln Ser Arg Ala Gln Leu Leu Ala

```

          35          40          45
Asn Ala Ser Val Met Pro Met Ser Ser Gln Asp Phe Ser Ser Ala Leu
  50          55          60
Leu Leu Asp Cys Cys Arg Thr Gln His Gln Leu Gln Cys Pro Gln Ser
  65          70          75          80
Pro Asp Phe Ser Gln Thr Asp Ser Ser Lys Pro Pro Leu Trp Ala Gly
          85          90          95
Tyr Thr Ser Gln Ser Arg Leu Val Thr Ser Leu Leu Ser Pro Pro Gly
          100          105          110
His Gly Gln Thr Phe Leu Thr Tyr Phe Thr Thr Leu Gln
          115          120          125

```

<210> 1423

<211> 336

<212> DNA

<213> Homo sapiens

<400> 1423

```

nntattcttc aatccttcca caatgtgcaa caaatggcga ttgactggct cactcgaaat
  60
ctctatttttg tggaccatgt cggtgaccgg atctttgttt gtaattccaa cggttctgta
  120
tgtgtcaccc tgattgatct ggagcttcac aatcctaaag caatagcagt agatccaata
  180
gcaggaaaac ttttctttac tgactacggg aatgtcgcca aagtgagag atgtgacatg
  240
gatgggatga accgaacaag gataattgat tcaaagacag agcagccagc tgcactggca
  300
ctagacctag tcaacaaatt ggtttactgg gtagat
  336

```

<210> 1424

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1424

```

Xaa Ile Leu Gln Ser Phe His Asn Val Gln Gln Met Ala Ile Asp Trp
  1          5          10          15
Leu Thr Arg Asn Leu Tyr Phe Val Asp His Val Gly Asp Arg Ile Phe
          20          25          30
Val Cys Asn Ser Asn Gly Ser Val Cys Val Thr Leu Ile Asp Leu Glu
          35          40          45
Leu His Asn Pro Lys Ala Ile Ala Val Asp Pro Ile Ala Gly Lys Leu
          50          55          60
Phe Phe Thr Asp Tyr Gly Asn Val Ala Lys Val Glu Arg Cys Asp Met
  65          70          75          80
Asp Gly Met Asn Arg Thr Arg Ile Ile Asp Ser Lys Thr Glu Gln Pro
          85          90          95
Ala Ala Leu Ala Leu Asp Leu Val Asn Lys Leu Val Tyr Trp Val Asp
          100          105          110

```

<210> 1425

<211> 672

<212> DNA

<213> Homo sapiens

<400> 1425

```

accggtgttt tcgacacct gggcgggttg agtgactatc gcagtcagat cgccccgatg
60
gcccgcatg tcgaagacct ggccttggcg ctacaggtca ttgccggtga agatggggtc
120
gatgccgggg tgattccgat gccgctgcgc cgtatgcaaa ctcaaacgct gaaggggttg
180
cgatcgccct ggtacagcga tggcggcatt gagcccgttg acgcgctcac gcacaccaca
240
ttgcaggcgg tcgccgatct attggacgct gaaggcgccct tgatccgccc ggccttcccc
300
tcggcggtga gcaatgcccg tgacattacc gaacgctatt gggcaatgag tcaaagctcc
360
ggcgcgagct cgatccagct gttttcagat tgggatcagt tccgtacagc catgctgggg
420
ttcatggccg actacgacat tatectgtgc cctgtcgatg ccgcgccggc gacccaactg
480
ggagagacgc ggccagggct gttcagttcc ccccttccta atggcttggc gggttggcct
540
tgtgtggttg tccgggccgg aacggatagc gcgggtttgc cggttggcgt gcagattgtc
600
gcgcgacctt ggcacgagcc tgtcgcgttg gcggcagcag cggccattga gcgcgcgctg
660
ccgttcacgc gt
672

```

<210> 1426

<211> 224

<212> PRT

<213> Homo sapiens

<400> 1426

```

Thr Gly Val Phe Asp His Leu Gly Gly Leu Ser Asp Tyr Arg Ser Gln
1      5      10      15
Ile Gly Pro Met Ala Arg His Val Glu Asp Leu Ala Leu Ala Leu Gln
20     25     30
Val Ile Ala Gly Glu Asp Gly Val Asp Ala Gly Val Ile Pro Met Pro
35     40     45
Leu Arg Arg Met Gln Thr Gln Thr Leu Lys Gly Leu Arg Val Ala Trp
50     55     60
Tyr Ser Asp Gly Gly Ile Glu Pro Val Asp Ala Leu Thr His Thr Thr
65     70     75     80
Leu Gln Ala Val Ala Asp Leu Leu Asp Ala Glu Gly Ala Leu Ile Arg
85     90     95
Pro Ala Phe Pro Ser Ala Leu Ser Asn Ala Arg Asp Ile Thr Glu Arg
100    105    110
Tyr Trp Ala Met Ser Gln Ser Ser Gly Ala Gln Ser Ile Gln Leu Phe
115    120    125
Ser Asp Trp Asp Gln Phe Arg Thr Ala Met Leu Gly Phe Met Ala Asp
130    135    140
Tyr Asp Ile Ile Leu Cys Pro Val Asp Ala Ala Pro Ala Thr Gln Leu

```

```

145              150              155              160
Gly Glu Thr Arg Pro Gly Leu Phe Ser Ser Pro Leu Pro Asn Gly Leu
165              170              175
Ala Gly Trp Pro Cys Val Val Val Arg Ala Gly Thr Asp Ser Ala Gly
180              185              190
Leu Pro Val Gly Val Gln Ile Val Ala Arg Pro Trp His Glu Pro Val
195              200              205
Ala Leu Ala Ala Ala Ala Ala Ile Glu Arg Ala Leu Pro Phe Thr Arg
210              215              220

```

<210> 1427
 <211> 270
 <212> DNA
 <213> Homo sapiens

```

<400> 1427
atggcttgct atctgaagca ggtggctgcc accgtctgca taaatgggcc cagcgcagtc
60
tttgatgttc cactaagata cggggatctg gtggtgacac ccatgcgact ggcttcggaa
120
ttgatgcaag tccatccctc aggggctgta cgcttccgtc actgttcagt tccccagaat
180
aaactcaact cacaaaagat acttccggtg gaaaaggccc aagggaagat cctcttcatt
240
gcaggagaga atgacgaaag cttggctagc
270

```

<210> 1428
 <211> 90
 <212> PRT
 <213> Homo sapiens

```

<400> 1428
Met Ala Cys Tyr Leu Lys Gln Val Ala Ala Thr Val Cys Ile Asn Gly
1      5      10      15
Pro Ser Ala Val Phe Asp Val Pro Leu Arg Tyr Gly Asp Leu Val Val
20     25     30
Thr Pro Met Arg Leu Ala Ser Glu Leu Met Gln Val His Pro Ser Gly
35     40     45
Ala Val Arg Phe Arg His Cys Ser Val Pro Gln Asn Lys Leu Asn Ser
50     55     60
Gln Lys Ile Leu Pro Val Glu Lys Ala Gln Gly Lys Ile Leu Phe Ile
65     70     75     80
Ala Gly Glu Asn Asp Glu Ser Leu Ala Ser
85     90

```

<210> 1429
 <211> 384
 <212> DNA
 <213> Homo sapiens

```

<400> 1429
ncctagggga ttatcgacat aaacgcgact gcgtaagggtt ggtgactcat cccccagcga
60

```

catgaggcaa acgccatgac atccgagaat gcaccgccgc gaggcaagat catcatgatg
 120
 gcggtgatcg ccggcgcggt gggtaccaac atttactgca ccagccgggt gctgccgttg
 180
 atcgccctcg acatgggctg cgagtgctcg acggtcaacc tgggtggcagg cgcggccttg
 240
 ctgggggttg ccaccgggtt ggcgttttta ttgcccattg gcgaccgctt tgaccggcgc
 300
 aagctgttac tcgggcagat tgcgctggcg ttctgctttg ccttggcggc ggcttttgcg
 360
 ccgaggatct gggcgttgat cggc
 384

<210> 1430
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1430
 Met Thr Ser Glu Asn Ala Pro Pro Arg Gly Lys Ile Ile Met Met Ala
 1 5 10 15
 Val Ile Ala Gly Ala Val Val Thr Asn Ile Tyr Cys Thr Gln Pro Val
 20 25 30
 Leu Pro Leu Ile Ala Ser Asp Met Gly Val Ala Val Ser Thr Val Asn
 35 40 45
 Leu Val Ala Gly Ala Ala Leu Leu Gly Phe Ala Thr Gly Leu Ala Phe
 50 55 60
 Leu Leu Pro Met Gly Asp Arg Phe Asp Arg Arg Lys Leu Val Leu Gly
 65 70 75 80
 Gln Ile Ala Leu Ala Phe Cys Phe Ala Leu Ala Ala Ala Phe Ala Pro
 85 90 95
 Arg Ile Trp Ala Leu Ile Gly
 100

<210> 1431
 <211> 414
 <212> DNA
 <213> Homo sapiens

<400> 1431
 aagcttcagg gcaggtgtcc cctgaagtca agcctgattc tgcattcatc tgtatagcac
 60
 aaactggcga cacctgtgac ttgaccttc ccagggtccc tgctctccgc tccaggtagg
 120
 ctcagcctga gggagggtgct ggcaggagcc tcggaggcag gaggggctgg cgtgcttcac
 180
 tccttcagct tgtcttgga gagctgtggg ctgcatcccc ctggctcctc gtccacagg
 240
 cagccccgct gtgtgtctgg tcttgagggt tggctgcagc ttctgggccc tgcttcacg
 300
 cctcttccc atgacctcc agccttgga ggtgtaatag tttcccatgt tgctgatctt
 360
 tagtttgcct cctctcctt ggctgttctt tctgctgttc catcctctgt gcac
 414

<210> 1432
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1432
 Met Gly Asn Tyr Tyr Thr Phe Gln Gly Trp Arg Ile Met Gly Arg Gly
 1 5 10 15
 Ala Gly Ser Arg Ala Gln Lys Leu Gln Pro Thr Cys Lys Thr Arg His
 20 25 30
 Thr Ala Gly Leu Pro Val Gly Arg Gly Ala Arg Gly Met Gln Pro Thr
 35 40 45
 Ala Leu Pro Arg Gln Ala Glu Gly Val Lys His Ala Ser Pro Ser Cys
 50 55 60
 Leu Arg Gly Ser Cys Gln His Leu Pro Gln Ala Glu Pro Thr Trp Ser
 65 70 75 80
 Gly Glu Gln Gly Pro Trp Glu Arg Gln Ser His Arg Cys Arg Gln Phe
 85 90 95
 Val Leu Tyr Lys Met Met Gln Asn Gln Ala
 100 105

<210> 1433
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 1433
 aaattttcga tggaactggg cggcaatgca ccgtttattg tatttgatga tgcggatgtg
 60
 gacgcggccg tcagcaatgc tgtggcttgc aagttccgct gtggtggaca aacgtgcatt
 120
 tcggccaacc gaatctacgt gcacgaacaa gtgcacgacg agtttgtctc taagtttggc
 180
 gagagagtca agaagcttcg cgtgggctac ggtctggacg aaaacatcaa cattggaccg
 240
 ctagtgaatg aggctagtca ggacaaagca gagtcacatg tccgtgcgat gcaa
 294

<210> 1434
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1434
 Lys Phe Ser Met Glu Leu Gly Gly Asn Ala Pro Phe Ile Val Phe Asp
 1 5 10 15
 Asp Ala Asp Val Asp Ala Ala Val Ser Asn Ala Val Ala Cys Lys Phe
 20 25 30
 Arg Cys Gly Gly Gln Thr Cys Ile Ser Ala Asn Arg Ile Tyr Val His
 35 40 45
 Glu Gln Val His Asp Glu Phe Val Ser Lys Phe Gly Glu Arg Val Lys
 50 55 60
 Lys Leu Arg Val Gly Tyr Gly Leu Asp Glu Asn Ile Asn Ile Gly Pro

65		70		75		80									
Leu	Val	Asn	Glu	Ala	Ser	Gln	Asp	Lys	Ala	Glu	Ser	His	Val	Arg	Ala
				85					90					95	
Met	Gln														

<210> 1435
 <211> 1772
 <212> DNA
 <213> Homo sapiens

<400> 1435
 ntttctggct tatgtggttt ccccggtgtg gaggtgggat ccactccccg catagtctct
 60
 cgtggcgatg ggacacctgg aaagtgctgt gatgtctttg aatgtgttaa tgatacaaag
 120
 ccagcctgcg tattaacaa tgtggaatat tatgatggag acatgtttcg aatggacaac
 180
 tgtcggttct gtcgatgcca agggggcggt gccatctgct tcaactgcca gtgtggtgag
 240
 ataaactgcg agaggtacta cgtgcccga ggagagtgtg gccagtgtg tgaaatccag
 300
 tgtatccttt taataatccc gctggctgct gccaatggc tgatccttgc ccacggagac
 360
 cggtggcggg aagacgactg cacattctgc cagtgcgtca acggtgaacg ccactgcgtt
 420
 gcgaccgtct gcggacagac ctgcacaaac cctgtgaaag tgccctggga gtgttgccct
 480
 gtgtgcgaag aaccaaccat catcacagt gatccacctg catgtgggga gttatcaaac
 540
 tgcactctga caggaagga ctgcattaat ggtttcaaac gcgatcaca tggttgctcg
 600
 acctgtcagt gcataaacac cgaggaacta tggtcagaac gtaaacaaag ctgcaccttg
 660
 aactgtccct tcggtttcct tactgatgcc caaaactgtg agatctgtga gtgccgcca
 720
 aggcccaaga agtgcagacc cataatctgt gacaagtatt gtccacttgg attgctgaag
 780
 aataagcag gctgtgacat ctgtcgctgt aagaaatgtc cagagctctc atgcagtaag
 840
 natctgcccc ttgggtttcc agcaggacag tcacggctgt cttatctgca agtgcagaga
 900
 ggccctctgt tcagctgggc caccatcct gtcgggcact tgtctcaccg tggatgggtca
 960
 tcatcataaa aatgaggaga gctggcacga tgggtgccgg gaatgctact gtctcaatgg
 1020
 acgggaaatg tgtgccctga tcacctgcc ggtgcctgcc tgtggcaacc ccaccattca
 1080
 ccctggacag tgctgcccac catgtgcaga tgactttgtg gtgcagaagc cagagctcag
 1140
 tactccnnet ccatttgcca cggccctgga ggagaatact ttgtggaagg agaaacgtgg
 1200
 aacattgact cctgtactca gtgcacctgc cacagcggac ggggtgctgtg tgagacagag
 1260

gtgtgcccac cgctgctctg ccagaacccc tcacgcaccc aggattcctg ctgcccacag
 1320
 tgtacagatc aaccttttcg gccttccttg tcccgcata acagcgtacc taattactgc
 1380
 aaaaatgatg aaggggatat attcctggca gctgagtcct ggaagcctga cgtttgatcc
 1440
 agctgcatct gcattgatag cgtaattagc tgtttctctg agtcctgccc ttctgtatcc
 1500
 tgtgaaaaac ctgtcttgag aaaaggccag tgttgctcct actgcataga agacacaatt
 1560
 ccaaagaagg tgggtgtgcca cttcagtggg aaggcctatg ccgacgagga gcggtgggac
 1620
 cttgacagct gcacccactg ctactgctg cagggccaga ccttctgctc gaccgtcagc
 1680
 tgccccctc tgccctgtgt tgagcccatc aacgtggaag gaagttgctg cccaatgtgt
 1740
 ccagaaatgt atgtcccagt cccttcacgc gt
 1772

<210> 1436

<211> 322

<212> PRT

<213> Homo sapiens

<400> 1436

Xaa	Ser	Gly	Leu	Cys	Gly	Phe	Pro	Val	Cys	Glu	Val	Gly	Ser	Thr	Pro
1				5					10					15	
Arg	Ile	Val	Ser	Arg	Gly	Asp	Gly	Thr	Pro	Gly	Lys	Cys	Cys	Asp	Val
			20					25						30	
Phe	Glu	Cys	Val	Asn	Asp	Thr	Lys	Pro	Ala	Cys	Val	Phe	Asn	Asn	Val
			35				40						45		
Glu	Tyr	Tyr	Asp	Gly	Asp	Met	Phe	Arg	Met	Asp	Asn	Cys	Arg	Phe	Cys
			50			55					60				
Arg	Cys	Gln	Gly	Gly	Val	Ala	Ile	Cys	Phe	Thr	Ala	Gln	Cys	Gly	Glu
65					70					75					80
Ile	Asn	Cys	Glu	Arg	Tyr	Tyr	Val	Pro	Glu	Gly	Glu	Cys	Cys	Pro	Val
				85					90					95	
Cys	Glu	Ile	Gln	Cys	Ile	Leu	Leu	Ile	Ile	Pro	Leu	Ala	Ala	Ala	Asn
			100					105						110	
Gly	Leu	Ile	Leu	Ala	His	Gly	Asp	Arg	Trp	Arg	Glu	Asp	Asp	Cys	Thr
			115				120					125			
Phe	Cys	Gln	Cys	Val	Asn	Gly	Glu	Arg	His	Cys	Val	Ala	Thr	Val	Cys
			130			135					140				
Gly	Gln	Thr	Cys	Thr	Asn	Pro	Val	Lys	Val	Pro	Gly	Glu	Cys	Cys	Pro
145					150					155					160
Val	Cys	Glu	Glu	Pro	Thr	Ile	Ile	Thr	Val	Asp	Pro	Pro	Ala	Cys	Gly
				165					170					175	
Glu	Leu	Ser	Asn	Cys	Thr	Leu	Thr	Gly	Lys	Asp	Cys	Ile	Asn	Gly	Phe
			180					185					190		
Lys	Arg	Asp	His	Asn	Gly	Cys	Arg	Thr	Cys	Gln	Cys	Ile	Asn	Thr	Glu
		195				200						205			
Glu	Leu	Cys	Ser	Glu	Arg	Lys	Gln	Gly	Cys	Thr	Leu	Asn	Cys	Pro	Phe
		210				215					220				
Gly	Phe	Leu	Thr	Asp	Ala	Gln	Asn	Cys	Glu	Ile	Cys	Glu	Cys	Arg	Pro


```

225          230          235          240
Arg Pro Lys Lys Cys Arg Pro Ile Ile Cys Asp Lys Tyr Cys Pro Leu
          245          250          255
Gly Leu Leu Lys Asn Lys His Gly Cys Asp Ile Cys Arg Cys Lys Lys
          260          265          270
Cys Pro Glu Leu Ser Cys Ser Lys Xaa Leu Pro Leu Gly Phe Pro Ala
          275          280          285
Gly Gln Ser Arg Leu Ser Tyr Leu Gln Val Gln Arg Gly Leu Cys Phe
          290          295          300
Ser Trp Ala Thr His Pro Val Gly His Leu Ser His Arg Gly Trp Ser
305          310          315          320
Ser Ser

```

<210> 1437
 <211> 372
 <212> DNA
 <213> Homo sapiens

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<400> 1437
cgggaactgt gctcgccac catccggtga ccggtgtcgg gcagtggcaa ctcaacaccc
60
aggccatgac cggagccatc ccgagcagca ggtgcacggc ccgggccgtt gactcgtgga
120
cccgtaccct catgacctcg atgcaacttc caccggtggtc caccgatcac atcgaccgct
180
cgggtccatgt cgatgctgag cagttcgacc ggttgcgcag cgagttcctg tcccgtgggc
240
acagttcttg ccctgccgca catgggggtcc tgggacttgg ccggggcctg ggtggccaga
300
cgcggtttct ccccgagttc cgtcgcggag aatcttccga gggcacagtt cgagttgttc
360
tgccgcacgc gt
372

```

<210> 1438
 <211> 62
 <212> PRT
 <213> Homo sapiens

```

<400> 1438
Met Ser Met Leu Ser Ser Ser Thr Gly Cys Ala Ala Ser Ser Cys Pro
1          5          10          15
Val Gly Thr Val Leu Ala Leu Pro His Met Gly Ser Trp Asp Leu Ala
20          25          30
Gly Ala Trp Val Ala Arg Arg Gly Phe Ser Pro Ser Ser Val Ala Glu
35          40          45
Asn Leu Pro Arg Ala Gln Phe Glu Leu Phe Cys Arg Thr Arg
50          55          60

```

<210> 1439
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 1439

accggtttgc tttccacaag gagagctaaa atgccggttg ctaagcagca tacatgccgc
60
tgcttctttc cacaatgtag acttaaaaaa atgccgtaa acattttacc atatgattga
120
gtcaggtgtg gggagtcgca gtaaaccattt taccatgtga ttgagtcag ggtggggagt
180
cgcggaata cacagggcag gcagttcgct atcacgatgt tctctctcat ttctgtcttt
240
ggtctgtctt cctgggtaat gtcacatgga gaccagggg atctgccatc agctgtgtgc
300
agtgggttaa caagacgacg gggaacttca gagtgcaggc agtcctcatc tttggcagat
360
tctgtatttg cacattcacc cactcactga aatgcatttg taaccccaaa atcaatacag
420
cggtttcaca gtcattttcc gacacgggca gaggggtgaa gatactgagt c
471

<210> 1440

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1440

Met Gly Gly Glu Ser Arg Lys Tyr Thr Gly Gln Ala Val Arg Tyr His
1 5 10 15
Asp Val Leu Ser His Phe Cys Leu Trp Ser Val Phe Leu Gly Asn Val
20 25 30
Thr Trp Arg Pro Arg Gly Ser Ala Ile Ser Cys Val Gln Trp Val Asn
35 40 45
Lys Thr Thr Gly Asn Phe Arg Val Gln Ala Val Leu Ile Phe Gly Arg
50 55 60
Phe Cys Ile Cys Thr Phe Thr His Ser Leu Lys Cys Ile Cys Asn Pro
65 70 75 80
Lys Ile Asn Thr Ala Val Ser Gln Ser Phe Ser Asp Thr Gly Arg Gly
85 90 95
Val Lys Ile Leu Ser
100

<210> 1441

<211> 376

<212> DNA

<213> Homo sapiens

<400> 1441

nnngagtcgc ggggaccttc atggactctc tcgtgctccg tagctcacac tcaccgcacg
60
gcagctcaca ttcaccacac gggaactcac tctcaccaca cggcagctca ctctctctgc
120
accgcagctc aacttcaccg cacggcagct cactctcacc gcacggcagc tcacactcac
180
cacacagcag ctactctta ccggacgggg aacctaaact taccggacgg gaagcctcac
240

tctcaccgca cggaaagctc acactcaccg caccgcagcc actctcaccg caccggcagct
 300
 cactctcacc gcaccgcagc tcactctcac cggacggggag ctcactctca ccacacggca
 360
 cctcactctc acgcgt
 376

<210> 1442
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1442
 Xaa Glu Ser Arg Gly Pro Ser Trp Thr Leu Ser Cys Ser Val Ala His
 1 5 10 15
 Thr His Arg Thr Ala Ala His Ile His His Thr Gly Thr His Ser His
 20 25 30
 His Thr Ala Ala His Ser Leu Cys Thr Ala Ala His Thr His Arg Thr
 35 40 45
 Ala Ala His Ser His Arg Thr Ala Ala His Thr His His Thr Ala Ala
 50 55 60
 His Ser Tyr Arg Thr Gly Asn Leu Asn Leu Pro Asp Gly Lys Pro His
 65 70 75 80
 Ser His Arg Thr Glu Ser Ser His Ser Pro His Arg Ser His Ser His
 85 90 95
 Arg Thr Ala Ala His Ser His Arg Thr Ala Ala His Ser His Arg Thr
 100 105 110
 Gly Ala His Ser His His Thr Ala Pro His Ser His Ala
 115 120 125

<210> 1443
 <211> 286
 <212> DNA
 <213> Homo sapiens

<400> 1443
 atggcagccc tgcgtcccaa ggagctgccca caactaatgg tcgccatcgg caatgcgagc
 60
 ataaaacgga caacacgctg cctgatcgaa tggcaactcc acaccatgac ccgtcctgcg
 120
 gaagccgcta cgacttcttg ggctgacatc gactgcgaca agaaaacctg gacgatccca
 180
 gcggagcgta tgaaaaagcg acgtgcccac gtcataccgc taaccgagca cgcacttgcc
 240
 ttgcttgaga caatcaaacc ctacagcggn cacagagagt acgcgt
 286

<210> 1444
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1444
 Met Ala Ala Leu Arg Pro Lys Glu Leu Pro Gln Leu Met Val Ala Ile

```

      1           5           10           15
Gly Asn Ala Ser Ile Lys Arg Thr Thr Arg Cys Leu Ile Glu Trp Gln
      20           25           30
Leu His Thr Met Thr Arg Pro Ala Glu Ala Ala Thr Thr Ser Trp Ala
      35           40           45
Asp Ile Asp Cys Asp Lys Lys Thr Trp Thr Ile Pro Ala Glu Arg Met
      50           55           60
Lys Lys Arg Arg Ala His Val Ile Pro Leu Thr Glu His Ala Leu Ala
      65           70           75           80
Leu Leu Glu Thr Ile Lys Pro Tyr Ser Gly His Arg Glu Tyr Ala
      85           90           95

```

<210> 1445

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1445

```

naccggttca ccggggaggg cttcgatggg ggcaaggtca gcatggttgg ccgattccc
60
atgtacctgt atggcacctt cgtcgttccg gacttcgacg cattcatctc cggcaagcag
120
actccctacc gggagacggg ctccaagcgg accactactt gggtctttcg agccgggtca
180
gaggtttatg agctggcctt ccccgagga gtcgtgttcg ccatgcaaag cgcctcgttg
240
agggtggacc ccgacaacac cgtcgacaag ctgccaacac tcggcgagcg cctg
294

```

<210> 1446

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1446

```

Xaa Arg Phe Thr Gly Glu Ala Phe Asp Gly Gly Lys Val Ser Met Val
      1           5           10           15
Gly Pro Ile Pro Met Tyr Leu Tyr Gly Thr Phe Val Val Pro Asp Phe
      20           25           30
Asp Ala Phe Ile Ser Gly Lys Gln Thr Pro Tyr Arg Glu Thr Val Ser
      35           40           45
Lys Arg Thr Thr Thr Trp Phe Phe Arg Ala Gly Ser Glu Val Tyr Glu
      50           55           60
Leu Ala Xaa Pro Arg Gly Val Val Phe Ala Met Gln Ser Ala Ser Leu
      65           70           75           80
Arg Val Asp Pro Asp Asn Thr Val Asp Lys Leu Pro Thr Leu Gly Glu
      85           90           95
Arg Leu

```

<210> 1447

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1447

nnncagaacc agaagatcaa cctgcatgac ggctcgttct ccgacgttgg cggcatggtg
 60
 ggtaatatct ccattgcccc ggggtgtcacg atcgagaacg ccgtcggcgg ttctgggcaac
 120
 gacctgctga tcggcaacga tgcggccaac gaactgcgcg gcgggtgccg caacgatatc
 180
 ctctacgggg ctggcggtgc cgaccaggtt tgggttggtt cgggcaacaa taccttcgtg
 240
 ttccgcccg tttccgactc ggcgccgaaa gcggccgacc ggatcatgga cttcaccagt
 300
 ggccaggaca agatcgatct gtccgggatc acccatgggt cgggcctgac cttcgtcaac
 360
 gcg
 363

<210> 1448

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1448

Xaa	Gln	Asn	Gln	Lys	Ile	Asn	Leu	His	Asp	Gly	Ser	Phe	Ser	Asp	Val
1				5					10					15	
Gly	Gly	Met	Val	Gly	Asn	Ile	Ser	Ile	Ala	Gln	Gly	Val	Thr	Ile	Glu
			20					25					30		
Asn	Ala	Val	Gly	Gly	Ser	Gly	Asn	Asp	Leu	Leu	Ile	Gly	Asn	Asp	Ala
			35				40					45			
Ala	Asn	Glu	Leu	Arg	Gly	Gly	Ala	Gly	Asn	Asp	Ile	Leu	Tyr	Gly	Ala
	50					55				60					
Gly	Gly	Ala	Asp	Gln	Val	Trp	Val	Gly	Ser	Gly	Asn	Asn	Thr	Phe	Val
65				70						75				80	
Phe	Ala	Ala	Val	Ser	Asp	Ser	Ala	Pro	Lys	Ala	Ala	Asp	Arg	Ile	Met
			85					90					95		
Asp	Phe	Thr	Ser	Gly	Gln	Asp	Lys	Ile	Asp	Leu	Ser	Gly	Ile	Thr	His
			100				105						110		
Gly	Ser	Gly	Leu	Thr	Phe	Val	Asn	Ala							
			115				120								

<210> 1449

<211> 541

<212> DNA

<213> Homo sapiens

<400> 1449

aggcgtacc agattatggg ctgcccgacc tcaatgacat gcgcttgagc ctgcatgaat
 60
 cactcagcca atcgcgcttg gcgattgaac gctttatcca ggcgtacgag cctcggttgg
 120
 ggaatgtacg tgtcaggagg agggaggggtg cctacaaccc tttggtactg gcgtttgtga
 180
 ttgaggcaac cgtcgtcatc gatggtgtca tccaacctgt ggtgtttaac gcacacctgg
 240

tggggggggg gacgggtcga gtgtgttacc tgatgttctt tgagctcttt taccagagtg
 300
 aactcagtgc attgcgcacg cttgggcggc gtttttctga acgcaatccc gccctggcac
 360
 cctttcttgc cgattccagg ccaggaccog gacgtcgagg gtctattgaa agtctttgcc
 420
 tttctccccg ggcgctgcg ccagaagctt gctgacgagc ttctgagggt gacccattca
 480
 ttgatgcact tgggtgtggc caattacatg cggccattgc cggccttcag tattttgcag
 540
 t
 541

<210> 1450
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 1450
 Met Arg Leu Ser Leu His Glu Ser Leu Ser Gln Ser Arg Leu Ala Ile
 1 5 10 15
 Glu Arg Phe Ile Gln Ala Tyr Glu Pro Arg Leu Gly Asn Val Arg Val
 20 25 30
 Arg Arg Arg Glu Gly Ala Tyr Asn Pro Leu Val Leu Ala Phe Val Ile
 35 40 45
 Glu Ala Thr Val Val Ile Asp Gly Val Ile Gln Pro Val Val Phe Asn
 50 55 60
 Ala His Leu Val Gly Gly Gly Thr Gly Arg Val Cys Tyr Leu Met Phe
 65 70 75 80
 Phe Glu Leu Phe Tyr Gln Ser Glu Leu Ser Ala Leu Arg Thr Leu Gly
 85 90 95
 Arg Arg Phe Ser Glu Arg Asn Pro Ala Leu Ala Pro Phe Leu Ala Asp
 100 105 110
 Ser Arg Pro Gly Pro Gly Arg Arg Gly Ser Ile Glu Ser Leu Cys Leu
 115 120 125
 Ser Pro Arg Ala Pro Ala Pro Glu Ala Cys
 130 135

<210> 1451
 <211> 326
 <212> DNA
 <213> Homo sapiens

<400> 1451
 aggcctctgg cgagttgatc tacagcttcg gacccgggtgc tatggctact ggcgtcaagt
 60
 acacgaacac agtttgcact cctgtggggc actacgaggt ggtgctgacg gattcttggg
 120
 gtgatggctg gaacccgggt tcttacctga acatgtacga cagctcggac aacttgatcc
 180
 aggagttcac gatggattac gacgcctctt ctcgtaacat taaggagaag cacggcttct
 240
 tcacgggtggc ttccaccacg agcagcggca ctgtctggaa gattatggcg aacaagaagg
 300

tggacaagga gtggaactct gtggac
326

<210> 1452
<211> 95
<212> PRT
<213> Homo sapiens

<400> 1452
Met Ala Thr Gly Val Lys Tyr Thr Asn Thr Val Cys Thr Pro Val Gly
1 5 10 15
Asp Tyr Glu Val Val Leu Thr Asp Ser Trp Gly Asp Gly Trp Asn Pro
20 25 30
Gly Ser Tyr Leu Asn Met Tyr Asp Ser Ser Asp Asn Leu Ile Gln Glu
35 40 45
Phe Thr Met Asp Tyr Asp Ala Ser Ser Arg Asn Ile Lys Glu Lys His
50 55 60
Gly Phe Phe Thr Val Ala Ser Thr Thr Ser Ser Gly Thr Val Trp Lys
65 70 75 80
Ile Met Ala Asn Lys Lys Val Asp Lys Glu Trp Asn Ser Val Asp
85 90 95

<210> 1453
<211> 326
<212> DNA
<213> Homo sapiens

<400> 1453
cggccgcgcg gccccacgtg caccgcgtgc atggtccttc gaggacgcgc atctgcagcc
60
cccgtcccc gcaaacctcc aggcgggaga gctccggcca aggcgctgc atcacatgat
120
acaggagggg catgcacacg ctcacgtgca cacagcctca aacacgctca tccgtacata
180
caggagtgtg tgaacgcact gaggtgcaca ggacaaagac acagacacct gtttgcacac
240
cgactcgcct atagaaatgt gcaaacacc cgtgcgcaca ggcccctcca cccatgcagg
300
cgtgtgcaca tcacccacac ggacac
326

<210> 1454
<211> 98
<212> PRT
<213> Homo sapiens

<400> 1454
Met Val Pro Arg Gly Arg Ala Ser Ala Ala Pro Ala Pro Arg Lys Pro
1 5 10 15
Pro Gly Arg Arg Ala Pro Ala Lys Ala Ala Ala Ser His Asp Thr Gly
20 25 30
Gly Ala Cys Thr Arg Ser Arg Ala His Ser Leu Lys His Ala His Pro
35 40 45
Tyr Ile Gln Glu Cys Val Asn Ala Leu Arg Cys Thr Gly Gln Arg His

```

      50              55              60
Arg His Leu Phe Ala His Arg Leu Ala Tyr Arg Asn Val Gln Thr Thr
65              70              75              80
Arg Ala His Arg Pro Leu His Pro Cys Arg Arg Val His Ile Thr His
      85              90              95
Thr Asp

```

<210> 1455
 <211> 314
 <212> DNA
 <213> Homo sapiens

<400> 1455
 gatccagtca aaaaagcatg tgggggtgct cacgctgggt ggaaaggtag tttgttgggt
 60
 gttgctatgg ctacagtga tgcctatgata gcagaatag gctgccgttt ggaaaaactt
 120
 tgggtggacct tggacccttc agtgggacct ggctgtttta ctctccagg ggaatcagca
 180
 gaggcatttc ataattctca tcctgcatgt gtacaactat ttgattcacc aaatccctgt
 240
 atcgacatcc gtaaagccac aagatacttg actggatttt tgtataactg cttcctgcct
 300
 ctttccaaac tgac
 314

<210> 1456
 <211> 104
 <212> PRT
 <213> Homo sapiens

```

<400> 1456
Asp Pro Val Lys Lys Ala Cys Gly Val Ala His Ala Gly Trp Lys Gly
  1              5              10              15
Thr Leu Leu Gly Val Ala Met Ala Thr Val Asn Ala Met Ile Ala Glu
      20              25              30
Tyr Gly Cys Arg Leu Glu Lys Leu Trp Trp Thr Leu Asp Pro Ser Val
      35              40              45
Gly Pro Gly Cys Phe Thr Leu Pro Gly Glu Ser Ala Glu Ala Phe His
      50              55              60
Asn Leu His Pro Ala Cys Val Gln Leu Phe Asp Ser Pro Asn Pro Cys
65              70              75              80
Ile Asp Ile Arg Lys Ala Thr Arg Tyr Leu Thr Gly Phe Leu Tyr Asn
      85              90              95
Cys Phe Leu Pro Pro Ser Lys Leu
      100

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<210> 1457
 <211> 437
 <212> DNA
 <213> Homo sapiens

<400> 1457

nattcaccag aatccccaga atcccccaaa tactacattg cacttttaggg ttcctttcta
 60
 gcacatgcat tgctaaaatc ggcgcccaga acctttctctg cccctctccc atgggatgca
 120
 atgtcagcgg agaaacagac caagtctgca ctagcctgtc cctacaccct cccagggaaa
 180
 aggtccccct gcgccaagtc aacagctccc agaggaagcc cactgactgc tctcttcagg
 240
 gtgggggaca caggaagtcc acgcttgac ggaggggacg ggcacaccta ccgtgactgc
 300
 cagagcccat tttgggagtc tgattggaat ttatacagca ggagcactgg gcactcggac
 360
 aactccagcc cacaaccaag tcaactgggt gcctaccac tgcccaagt cctcaagtca
 420
 acacattcct gcactgn
 437

<210> 1458
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 1458
 Met Ser Ala Glu Lys Gln Thr Lys Ser Ala Leu Ala Cys Pro Tyr Thr
 1 5 10 15
 Leu Pro Arg Lys Arg Ser Pro Cys Ala Lys Ser Thr Ala Pro Arg Gly
 20 25 30
 Ser Pro Leu Thr Ala Leu Phe Arg Val Gly Asp Thr Gly Ser Pro Arg
 35 40 45
 Leu His Gly Gly Asp Gly His Thr Tyr Arg Asp Cys Gln Ser Pro Phe
 50 55 60
 Trp Glu Ser Asp Trp Asn Leu Tyr Ser Arg Ser Thr Gly His Ser Asp
 65 70 75 80
 Asn Ser Ser Pro Gln Pro Ser His Trp Ala Ala Tyr Pro Leu Pro Lys
 85 90 95
 Cys Leu Lys Ser Thr His Ser Cys Thr
 100 105

<210> 1459
 <211> 295
 <212> DNA
 <213> Homo sapiens

<400> 1459
 ngagaggtca ccggccacga gattcccgcg gaggtcgcgc cccgccgcgc gggcgacccg
 60
 gccgtactca tcgcttcttc ggagaagatc aagcgggagc tgggctggaa cccgacgcgc
 120
 acggatctgc gccgcatcgt cgaggacgcc tgggccttta cggctggggg ggccgaacgg
 180
 taaacccttg gtaaggcgac gcagttatcc tcgatctcct cccagagcag gcggcagccc
 240
 gccactgcgg tgtcgagcat gccctccac tccccgatcg ccatgagctg gcgan
 295

<210> 1460
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 1460
 Xaa Glu Val Thr Gly His Glu Ile Pro Ala Glu Val Ala Pro Arg Arg
 1 5 10 15
 Ala Gly Asp Pro Ala Val Leu Ile Ala Ser Ser Glu Lys Ile Lys Arg
 20 25 30
 Glu Leu Gly Trp Asn Pro Thr Arg Thr Asp Leu Arg Arg Ile Val Glu
 35 40 45
 Asp Ala Trp Ala Phe Thr Ala Gly Gly Ala Glu Arg
 50 55 60

<210> 1461
 <211> 432
 <212> DNA
 <213> Homo sapiens

<400> 1461
 nnaagcttac gtgaaatgaa acgtcaatgg caacaggcga caatcgtgcc agagaaattg
 60
 gttgaagcac agtcaattgc gggttctaaa tgcgaacacg cctggcgctt acaacgttca
 120
 gaaaatgact gggtaggctt tgaaaaaat tggaaagagg ttgttgcatc atcccgtgaa
 180
 gaagcacaaa ttcgcggtga agcgcttaat ctaacgcctt atgatgcatc gcttgataag
 240
 tttgaaccag gcacgacaac ggtttcgctc aatactttgt tttcaaaggt aaagacgtgg
 300
 ttacctacgt taattgaaaa agcgtagtaa aagcagcaat cagaatctat cattatgcca
 360
 tcaggcacct tttccacggc gaatcaaaaa gcccttggat tagaaataat gaaattgtta
 420
 aaattcgact tt
 432

<210> 1462
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 1462
 Xaa Ser Leu Arg Glu Met Lys Arg Gln Trp Gln Gln Ala Thr Ile Val
 1 5 10 15
 Pro Glu Lys Leu Val Glu Ala Gln Ser Ile Ala Gly Ser Lys Cys Glu
 20 25 30
 His Ala Trp Arg Leu Gln Arg Ser Glu Asn Asp Trp Val Gly Phe Glu
 35 40 45
 Lys Asn Trp Lys Glu Val Val Ala Leu Ser Arg Glu Glu Ala Gln Ile
 50 55 60
 Arg Gly Glu Ala Leu Asn Leu Thr Pro Tyr Asp Ala Met Leu Asp Lys

```

65              70              75              80
Phe Glu Pro Gly Thr Thr Thr Val Ser Leu Asn Thr Leu Phe Ser Lys
              85              90              95
Val Lys Thr Trp Leu Pro Thr Leu Ile Glu Lys Ala Leu Glu Lys Gln
              100              105              110
Gln Ser Glu Ser Ile Ile Met Pro Ser Gly Thr Phe Ser Thr Ala Asn
              115              120              125
Gln Lys Ala Leu Gly Leu Glu Ile Met Lys Leu Leu Lys Phe Asp Phe
              130              135              140

```

<210> 1463

<211> 421

<212> DNA

<213> Homo sapiens

<400> 1463

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nacgcgttcc agagcaagct ggacctgacc gccttcgaat tcttctccga caaggccctg
60
gccaaaagtca tgggccgtgg cgacgtaccg gcaccgttcg aaaccgaatg cccgtttctac
120
gcgctgctgg aattcgaagc caccaccgaa gaagtcgcca accacgccct ggaaaccttc
180
gagcactgcg ttgagcaggg ctgggtgctg gacggcgtga tgagccagag cgaaacccaa
240
ctgcacaacc tgtggaaact gcgcgagtac atctcggaga ctatttccca ctggacgccc
300
tacaagaacg acatctccgt gaccgtttcc aaagtccccg cgttcttgaa ggaaattgac
360
gcgatcgctg tgagcattac ccggacttcg aaattgttgg tcggccacat cggcgacgca
420
a
421

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<210> 1464

<211> 140

<212> PRT

<213> Homo sapiens

<400> 1464

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Xaa Ala Phe Gln Ser Lys Leu Asp Leu Thr Ala Phe Glu Phe Phe Ser
1              5              10              15
Asp Lys Ala Leu Ala Lys Val Met Gly Arg Gly Asp Val Pro Ala Pro
              20              25              30
Phe Glu Thr Glu Cys Pro Phe Tyr Ala Leu Leu Glu Phe Glu Ala Thr
              35              40              45
Thr Glu Glu Val Ala Asn His Ala Leu Glu Thr Phe Glu His Cys Val
              50              55              60
Glu Gln Gly Trp Val Leu Asp Gly Val Met Ser Gln Ser Glu Thr Gln
65              70              75              80
Leu His Asn Leu Trp Lys Leu Arg Glu Tyr Ile Ser Glu Thr Ile Ser
              85              90              95
His Trp Thr Pro Tyr Lys Asn Asp Ile Ser Val Thr Val Ser Lys Val
              100              105              110
Pro Ala Phe Leu Lys Glu Ile Asp Ala Ile Val Val Ser Ile Thr Arg

```

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<210> 1465
<211> 424
<212> DNA
<213> Homo sapiens
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<210> 1466
<211> 124
<212> PRT
<213> Homo sapiens
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<210> 1467
<211> 441
<212> DNA
<213> Homo sapiens
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<400> 1467

nacgcgtgac ggcgaatgag cggcggaggc atgacaacga gcgcaccgtt ccgcagcttg
 60
 gtgcccgtgca tcatggctca agtgccgcgc aactttcggc tgctcgagga gctggagaaa
 120
 ggcgaaaagg ggctaggaaa tggctcgtgc tcttacggcc ttgcgaacag tgatgacatt
 180
 cgtacgtatg cgcctgtgct gatggtcatg acaacgtgga atgccacgat cctaggccccg
 240
 gccaaactcgg tgcattgagaa ccgcatatac tgccctgcgc tcgtgtgtgg cgactcgtac
 300
 cctcttctg cgcctgagat ttggttccag acgcgcatca acttgccgtg cgtcgtatgcc
 360
 cacacggggc gcgtcatgcc cgatcagttc tcgcccctct tgcattggcg tgatgagtac
 420
 actatggaaa gctgctgcat g
 441

<210> 1468

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1468

Met	Ala	Gln	Val	Pro	Arg	Asn	Phe	Arg	Leu	Leu	Glu	Glu	Leu	Glu	Lys
1				5					10					15	
Gly	Glu	Lys	Gly	Leu	Gly	Asn	Gly	Ser	Cys	Ser	Tyr	Gly	Leu	Ala	Asn
			20					25					30		
Ser	Asp	Asp	Ile	Arg	Thr	Tyr	Ala	Pro	Val	Leu	Met	Val	Met	Thr	Thr
		35					40					45			
Trp	Asn	Ala	Thr	Ile	Leu	Gly	Pro	Ala	Asn	Ser	Val	His	Glu	Asn	Arg
		50				55					60				
Ile	Tyr	Cys	Leu	Arg	Leu	Val	Cys	Gly	Asp	Ser	Tyr	Pro	Leu	Val	Pro
65				70					75					80	
Pro	Glu	Ile	Trp	Phe	Gln	Thr	Arg	Ile	Asn	Leu	Pro	Cys	Val	Asp	Ala
			85					90					95		
His	Thr	Gly	Arg	Val	Met	Pro	Asp	Gln	Phe	Ser	Pro	Leu	Leu	His	Trp
		100					105					110			
Arg	Asp	Glu	Tyr	Thr	Met	Glu	Ser	Cys	Cys	Met					
		115					120								

<210> 1469

<211> 468

<212> DNA

<213> Homo sapiens

<400> 1469

nngctcgatc tagtctatgg gctaaatgat cgaccgaacc cttttattgc ttttttagcg
 60
 gcgcttcaac atcttttagc gatttttagtg ccaattgtca ccnctggatt attgatttgt
 120
 ttggcattag gcgtgtctcg cgaagacacc aatatgattc tttctatgtc attaattatt
 180

tcagggatcg cgactttctt gcaatgtaaa aaagttgggc catttggcgc tggattactt
 240
 attgttcaag gaactagctt taatttcatt ggtcctatca ttggtatagg tagctcaatg
 300
 gtggctgctg gcacacctgt cgaacaagtt atggctgcga tttttgggtg cgtaatcgca
 360
 gggttcattta tcgaaatggg cgtatctcaa attttacctt gggtaaaaaa gctgattact
 420
 cctctcgtaa caggaatcgt cgttctgttg attggctctac cattaatg
 468

<210> 1470

<211> 156

<212> PRT

<213> Homo sapiens

<400> 1470

Xaa	Leu	Asp	Leu	Val	Tyr	Gly	Leu	Asn	Asp	Arg	Pro	Asn	Pro	Phe	Ile
1				5					10					15	
Ala	Phe	Leu	Ala	Ala	Leu	Gln	His	Leu	Leu	Ala	Ile	Leu	Val	Pro	Ile
			20					25					30		
Val	Thr	Xaa	Gly	Leu	Leu	Ile	Cys	Leu	Ala	Leu	Gly	Val	Ser	Arg	Glu
		35				40					45				
Asp	Thr	Asn	Met	Ile	Leu	Ser	Met	Ser	Leu	Ile	Ile	Ser	Gly	Ile	Ala
	50				55				60						
Thr	Phe	Leu	Gln	Cys	Lys	Lys	Val	Gly	Pro	Phe	Gly	Ala	Gly	Leu	Leu
65				70				75						80	
Ile	Val	Gln	Gly	Thr	Ser	Phe	Asn	Phe	Ile	Gly	Pro	Ile	Ile	Gly	Ile
			85					90					95		
Gly	Ser	Ser	Met	Val	Ala	Ala	Gly	Thr	Pro	Val	Glu	Gln	Val	Met	Ala
			100					105					110		
Ala	Ile	Phe	Gly	Val	Val	Ile	Ala	Gly	Ser	Phe	Ile	Glu	Met	Gly	Val
		115					120					125			
Ser	Gln	Ile	Leu	Pro	Trp	Val	Lys	Lys	Leu	Ile	Thr	Pro	Leu	Val	Thr
	130					135					140				
Gly	Ile	Val	Val	Leu	Leu	Ile	Gly	Leu	Pro	Leu	Met				
145				150						155					

<210> 1471

<211> 341

<212> DNA

<213> Homo sapiens

<400> 1471

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 gttatcgatc agccgctgac gattttgcac accaatctgg cggtgtatat cggcattgtg
 120
 tacgcttata tcgccgtttat ggtactgccc atttatacgg cgctgacgcg cattgattac
 180
 tcgctgggtg aggcctcact ggatctcggt gcccgccgc tgaaaacggt tttcaatgtg
 240
 attgtcccgc tcaccaaagg cggcattata gcggggtcga tgctgggtgt tatccccggc
 300

gtcggtgagt ttgttatccc ggaactgctc ggcggcggcc g
341

<210> 1472
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1472
Ala Trp Met Gly Ile Leu Lys Asn Asn Gly Val Leu Asn Asn Phe Leu
1 5 10 15
Leu Trp Leu Gly Val Ile Asp Gln Pro Leu Thr Ile Leu His Thr Asn
20 25 30
Leu Ala Val Tyr Ile Gly Ile Val Tyr Ala Tyr Leu Pro Phe Met Val
35 40 45
Leu Pro Ile Tyr Thr Ala Leu Thr Arg Ile Asp Tyr Ser Leu Val Glu
50 55 60
Ala Ser Leu Asp Leu Gly Ala Arg Pro Leu Lys Thr Phe Phe Asn Val
65 70 75 80
Ile Val Pro Leu Thr Lys Gly Gly Ile Ile Ala Gly Ser Met Leu Val
85 90 95
Phe Ile Pro Ala Val Gly Glu Phe Val Ile Pro Glu Leu Leu Gly Gly
100 105 110
Gly

<210> 1473
<211> 352
<212> DNA
<213> Homo sapiens

<400> 1473
tccggaactg ctcaatgtct gtccagcaca taagatccat gcttgaagaa tgagtctcaa
60
gaaactgacg gaaatgttca aactccagtt tgttgtaag cagatcacta aacttaaaat
120
gcttgatttc tgcaggaaca ttatcccaat attctgttcg tttagagacg ttagagagtg
180
ataaaatgcc agttccaatt tcacaagtgg tgccttcagc tttcttgga aatgtctctt
240
tatgcaaagc ctgtagcttt ctgaagtatg tggagtctaa ctgtcgagtt tcttcacca
300
gtccacctt ttataagca atttggtccg attttaccat ctttgtccat gg
352

<210> 1474
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1474
Met Val Lys Ser Asp Gln Ile Ala Tyr Lys Lys Val Glu Leu Val Glu
1 5 10 15
Glu Thr Arg Gln Leu Asp Ser Thr Tyr Phe Arg Lys Leu Gln Ala Leu

```

                20                25                30
His Lys Glu Thr Phe Ser Lys Lys Ala Glu Asp Thr Thr Cys Glu Ile
                35                40                45
Gly Thr Gly Ile Leu Ser Leu Ser Asn Val Ser Lys Arg Thr Glu Tyr
                50                55                60
Trp Asp Asn Val Pro Ala Glu Tyr Lys His Phe Lys Phe Ser Asp Leu
65                70                75                80
Leu Asn Asn Lys Leu Glu Phe Glu His Phe Arg Gln Phe Leu Glu Thr
                85                90                95
His Ser Ser Ser Met Asp Leu Met Cys Trp Thr Asp Ile Glu Gln Phe
                100                105                110
Arg

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<210> 1475
 <211> 389
 <212> DNA
 <213> Homo sapiens

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<400> 1475
accggtgccg gagccgatct ccacgatggt cttggcgccg gtgcggccga accactcatc
60
gacatcgata agctcatcgc ttaagacgcg gccagctcg ggccagcatt gctcaaaaag
120
ctggtgctgg ttgtccgtga gcgtgccgcg ggggaaaggg acctttgccc aggcgcgggt
180
agtcagggtc attatcaaag accgcattga agtccgtttg cggcggggcga cccggcggga
240
tttctccggc aggggggtgtt ttgagaatta tccgtgctat acatcgcgcc ctatttttcc
300
ctgtccaggc atggcaagca atatgccgcg ccgggtatatt tccccgccgt atggggaggg
360
ggataaccgg agcttgacgg ggtggtgtc
389

```

<210> 1476
 <211> 121
 <212> PRT
 <213> Homo sapiens

```

<400> 1476
Met Val Leu Ala Pro Val Arg Pro Asn His Ser Ser Thr Ser Ile Ser
1                5                10                15
Ser Ser Leu Lys Thr Arg Pro Ser Ser Gly Gln His Cys Ser Lys Ser
20                25                30
Trp Cys Trp Leu Ser Val Ser Val Pro Arg Gly Lys Gly Thr Phe Ala
35                40                45
Gln Ala Arg Val Val Gln Val Ile Ile Lys Asp Arg Ile Glu Val Arg
50                55                60
Leu Arg Arg Ala Thr Arg Arg His Phe Ser Gly Arg Gly Cys Phe Glu
65                70                75                80
Asn Tyr Pro Cys Tyr Thr Ser Arg Pro Ile Phe Pro Cys Pro Gly Met
85                90                95
Ala Ser Asn Met Pro Arg Arg Val Phe Ser Pro Pro Tyr Gly Glu Gly

```


100 105 110
 Asp Asn Arg Ser Leu Thr Gly Trp Cys
 115 120

<210> 1477
 <211> 500
 <212> DNA
 <213> Homo sapiens

<400> 1477
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 60
 ttctccctt atttgctggg ccaaacggac ggccaaccta aagatgcca atgggcatcg
 120
 gcgctgtgtg gtattgatgc cgaaatcatc cgggcactgg ccgccaat ggcggccaac
 180
 cgtacgcaaa tcattgcggg ctggtgcgtg caacgtatgc aacacggcga acaatgggcg
 240
 tggatgacgg tagtgctggc ggcgatgctt ggccaaatcg gcttaccggg cggcgggttc
 300
 ggttttgggt ggccctccaa cggcgcaggt acccccgagc cgcaaggggt gatcctgagc
 360
 ggtttctccg gttccccgc tacgccggca cgccatgcc aaggggattt caaagggttac
 420
 agcagtacca ttccgatcgc gcgctttatc gatgccatgc tggagccggg caaggagatc
 480
 gattggaatg gcaaacgcgt
 500

<210> 1478
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 1478
 Tyr Ser Glu Asn Leu His Asp Thr His Phe Leu Lys Thr Tyr Cys Val
 1 5 10 15
 Gly Phe Glu Gln Phe Leu Pro Tyr Leu Leu Gly Gln Thr Asp Gly Gln
 20 25 30
 Pro Lys Asp Ala Gln Trp Ala Ser Ala Leu Cys Gly Ile Asp Ala Glu
 35 40 45
 Ile Ile Arg Ala Leu Ala Arg Gln Met Ala Ala Asn Arg Thr Gln Ile
 50 55 60
 Ile Ala Gly Trp Cys Val Gln Arg Met Gln His Gly Glu Gln Trp Ala
 65 70 75 80
 Trp Met Thr Val Val Leu Ala Ala Met Leu Gly Gln Ile Gly Leu Pro
 85 90 95
 Gly Gly Gly Phe Gly Phe Gly Trp Pro Ser Asn Gly Ala Gly Thr Pro
 100 105 110
 Glu Pro Gln Gly Val Ile Leu Ser Gly Phe Ser Gly Ser Pro Ala Thr
 115 120 125
 Pro Ala Arg His Ala Lys Gly Asp Phe Lys Gly Tyr Ser Ser Thr Ile
 130 135 140
 Pro Ile Ala Arg Phe Ile Asp Ala Met Leu Glu Pro Gly Lys Glu Ile

145
Asp Trp Asn Gly Lys Arg
165

155

160

<210> 1479
<211> 421
<212> DNA
<213> Homo sapiens

<400> 1479
acgcgtgtgg agctggcacc atgaaagcac gatgtgcatc actcatagag gcaggcacac
60
ttaagtatgt tctttacatt gaaacagaaa ggaaagaaga taggaaaaat ggtgccagca
120
cgctgggctt tttttgtttg ctgttttggg tggggtgtgc tagtgcaagt tccgggtgtac
180
gcttttgtcc tcaaacaggc ttgttccccg gtcagagttt cattattgtt gctggtaaac
240
aaatgccaag tttgacaaaa aacagtgaat taaagcaaaa gattttgaaa aatgcttcat
300
catgtcagaa ggaaagaacc cttttcacgg gtgcctgccc acatttcctt gccagcctg
360
agaccctatt gactttgaat tatcttttgc tgttttattt ctatgaaaat tatatacgcg
420
t
421

<210> 1480
<211> 133
<212> PRT
<213> Homo sapiens

<400> 1480
Met Lys Ala Arg Cys Ala Ser Leu Ile Glu Ala Gly Thr Leu Lys Tyr
1 5 10 15
Val Leu Tyr Ile Glu Thr Glu Arg Lys Glu Asp Arg Lys Asn Gly Ala
20 25 30
Ser Thr Leu Gly Phe Phe Cys Leu Leu Phe Trp Val Gly Cys Ala Ser
35 40 45
Ala Val Ser Gly Val Arg Phe Cys Pro Gln Thr Gly Leu Phe Pro Gly
50 55 60
Gln Ser Phe Ile Ile Val Ala Gly Lys Gln Met Pro Ser Leu Thr Lys
65 70 75 80
Asn Ser Glu Ile Lys Gln Lys Ile Leu Lys Asn Ala Ser Ser Cys Gln
85 90 95
Lys Glu Arg Thr Leu Phe Thr Gly Ala Cys Pro His Phe Leu Ala Gln
100 105 110
Pro Glu Thr Leu Leu Thr Leu Asn Tyr Leu Leu Leu Phe Tyr Phe Tyr
115 120 125
Glu Asn Tyr Ile Arg
130

<210> 1481
<211> 545

<212> DNA

<213> Homo sapiens

<400> 1481

gtcgggtcgc cgcccagtct cgtgccgaca tgcagttcct ggcccgggag gtcgcatcca
60
tccggatgca gatgggagcag ttggccacgc gcgattatct gcgctcggag ctacgcgacg
120
agttgcgctc cctgctcgag gagatcgagg cctcaccggc ctcccactaa ctgaccgggt
180
tcgcgacgag cgagttgtcg catcgggcca acggtgtgta gacaagtcag catgagcacc
240
gagaaccagcagg ttggttaaggc cattgccgat gcgttgtcgc acgtcaatga ccccgagatc
300
aaacgccccca ttaccgatct caacatgatt gatgagatta ccgtcgacga gcaaggacgc
360
gcttttcgtcc gcatactgct gaccgtcgcc ggggtgtccc tcaagaccga gctgcgtgag
420
caggccaccg aggctgtgag cagcgttgac ggggtgacca gtgtttccgt cgaactcggc
480
accatgaccg acgaacagcg cgatgctctc aaagttcagc tgcgcggtga cgtccccgaa
540
cgcggt
545

<210> 1482

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1482

Met	Ser	Thr	Glu	Asn	Pro	Val	Val	Lys	Ala	Ile	Ala	Asp	Ala	Leu	Ser
1				5					10					15	
His	Val	Asn	Asp	Pro	Glu	Ile	Lys	Arg	Pro	Ile	Thr	Asp	Leu	Asn	Met
		20						25					30		
Ile	Asp	Glu	Ile	Thr	Val	Asp	Glu	Gln	Gly	Arg	Ala	Phe	Val	Arg	Ile
		35					40					45			
Leu	Leu	Thr	Val	Ala	Gly	Cys	Pro	Leu	Lys	Thr	Glu	Leu	Arg	Glu	Gln
	50					55				60					
Ala	Thr	Glu	Ala	Val	Arg	Ser	Val	Asp	Gly	Val	Thr	Ser	Val	Ser	Val
65				70					75					80	
Glu	Leu	Gly	Thr	Met	Thr	Asp	Glu	Gln	Arg	Asp	Ala	Leu	Lys	Val	Gln
			85					90						95	
Leu	Arg	Gly	Asp	Val	Pro	Glu	Arg								
															100

<210> 1483

<211> 625

<212> DNA

<213> Homo sapiens

<400> 1483

gtacggcttc gagaggggcta cagtgtccga gaggtcacac tggccaaagg aggggtcccaa
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ttggaggtaa agctggtgct gctgtggaaa cacaacatgc gcattgagta tgtggctatg
 120
 gcatacctggc ccctggagcc tgagggccct cgagtaaacac ggggtggaagt gacgatggaa
 180
 ggcggtacg acattttgca tgatgtgtcc tgtgcaactaa ggcagcccat tcgttcattg
 240
 tatcgtaccc atgttatccg gcgtttcttg aacacgctgc agagcatcaa ccagacagac
 300
 cagatgcttg cccaccttca gtccttctcc tcagtgcctg agcatttcac gcttcctgac
 360
 agcaccaaga gcggagtgcc actcttctac atccctccag gctccaccac cccggtgctc
 420
 tccctccagc ccagtgggtc tgactcatcc catgcccagt ttgctgccta ctggaagccc
 480
 agtgctgtcc atggatgcaa attcctggca gcgatggctg cacatgcac gcttggtgct
 540
 aatcctggag catgacacac caatcccaaa gcacttgac accccgggca gcaatgggcg
 600
 ctactacgga gagaagacaa cgcgt
 625

<210> 1484

<211> 184

<212> PRT

<213> Homo sapiens

<400> 1484

Val	Arg	Leu	Arg	Glu	Gly	Tyr	Ser	Val	Arg	Glu	Val	Thr	Leu	Ala	Lys
1				5					10					15	
Gly	Gly	Ser	Gln	Leu	Glu	Val	Lys	Leu	Val	Leu	Leu	Trp	Lys	His	Asn
			20				25						30		
Met	Arg	Ile	Glu	Tyr	Val	Ala	Met	Ala	Ser	Trp	Pro	Leu	Glu	Pro	Glu
		35				40						45			
Gly	Pro	Arg	Val	Thr	Arg	Val	Glu	Val	Thr	Met	Glu	Gly	Gly	Tyr	Asp
	50				55					60					
Ile	Leu	His	Asp	Val	Ser	Cys	Ala	Leu	Arg	Gln	Pro	Ile	Arg	Ser	Leu
65				70					75					80	
Tyr	Arg	Thr	His	Val	Ile	Arg	Arg	Phe	Trp	Asn	Thr	Leu	Gln	Ser	Ile
			85					90					95		
Asn	Gln	Thr	Asp	Gln	Met	Leu	Ala	His	Leu	Gln	Ser	Phe	Ser	Ser	Val
			100				105						110		
Pro	Glu	His	Phe	Thr	Leu	Pro	Asp	Ser	Thr	Lys	Ser	Gly	Val	Pro	Leu
		115					120					125			
Phe	Tyr	Ile	Pro	Pro	Gly	Ser	Thr	Thr	Pro	Val	Leu	Ser	Leu	Gln	Pro
	130				135						140				
Ser	Gly	Ser	Asp	Ser	Ser	His	Ala	Gln	Phe	Ala	Ala	Tyr	Trp	Lys	Pro
145				150					155					160	
Ser	Ala	Val	His	Gly	Cys	Lys	Phe	Leu	Ala	Ala	Met	Ala	Ala	His	Ala
			165					170						175	
Ser	Pro	Gly	Ala	Asn	Pro	Gly	Ala								
			180												

<210> 1485

<211> 2058

<212> DNA

<213> Homo sapiens

<400> 1485

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ctgttcctgc cacagtcacg acccagacta tttatcattg gtgtcagaaa cgatattttt
120
gttggcgata ttacttctga atcacctctt aaaatgtggc ataccagaac tttattgaat
180
gcctacagca atctgaaaga tgatgccaaag tccaattggg tatgggtgga ccttcctatg
240
ccagcccaga gaaaatctgc tttcgccgat ttgattgaag aaaatcctag cagcggttaag
300
tgccataccc ggaaggaaac acagcagctc ttggatatga tgactgatgt taacttagct
360
aagggttgagg ctgcaaaaaa gctatcgatc gagtctaagg aaaatgttgt agggacaatt
420
tataaaagaa ctgcgaccga tagctttgga gttaaagcgc agcgtgctga agtgccggtt
480
gatgatgttg ccggttgtct tcgcaccctt ggaggggggt caagtcggca agtcataatg
540
gtcgttgata acgggactgt aaaaacgagg ttgatctcaa gtagagaaac tgcaaggctt
600
atgggggttac ccgacgaata catattgcc aaaaattata atgaggcgta tcaactaacg
660
ggtgatgggtg ttgtagtgcc ggttgtatcc cacatagcca ctcatatttt tgacccagtg
720
atggagcgtg tgtttgagga tgcggcgagg ctgcttaagc aaatcgcata gcatcgtttt
780
ggcaggaaga tatgagcgtt attccgtgta aaaaggacct tcagctaaaa aaattgattg
840
aatccctatgc agaagccttg aaagttgagg ccataagct aggagagcat ggattaactg
900
aagctgaatt ttatgatagc ggcctctttc ggggggctat cgagcgaatt cgaggacagt
960
tctccgcgac catgcgggag aaaagaaatt tcgttaagca tgttttaaat tacatgcagg
1020
ataacgacta cattgctgat tgggagtcgg ctggtgaatc gaatcgccat gattatatgg
1080
taactctcaa ttctgggcgc aaagctgcta ttgagctgaa aggggtgcctt gatggcaata
1140
acactaacat ctttgatcgc cccctcagg cagaagaatt tggtatctgg agtgtatgca
1200
caaatcctgg tgctgacctt cagcataatg tttggctctg gcttcacacc agactaagtg
1260
ctgaaatcat ttcacgggag caaaggattg atggaatggc catttgggac tgggcttggt
1320
gaacagtcgg aaggccatgc cccaaaatag caactgaacc tgagcgggct gtaacatttg
1380
ggccgttcaa attgccgcca ccatgtttgt atcttttacc ttcgacgatt ccaagcccaa
1440
gaaacaaccc gtctccaaga gctcagcaga ttgaagacgt gcagctaata aaagcggttc
1500

acgattgttt tgggtgccgg tctgaagaag ttaatttcgt taactttgat gttgggtatc
 1560
 atggtaaaga taccgtccgt aaaacgacta tcattcgaaa cggcatgggtg gagcgtgaat
 1620
 cggaaatgac ggcaataagg cggctcttaat ttgtgcatgc ctatgctgca tgaatccgca
 1680
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 1740
 catgcacctg catgaaaacc gctacataaa gcgggcaggc gtggcgggga tacgagcgcg
 1800
 cgcaacgggg tgaaatgggtg aatatcaggg gcaatctccg gcacgctggc ggcttgaatc
 1860
 gggtaggggtg agtgagaggg agcaataaag aagcgccccg cagaatgctg ctggggcgct
 1920
 gtgagaggtg gtcttggtgt cgcggtgcgg tgggtcagtc gtagcgattg tcttctgtca
 1980
 gcccagcgt gtacggctca aagcggatca cttcttcgcc cagccagtca ttaagctccc
 2040
 gcagtcgctt ctgcaggc
 2058

<210> 1486

<211> 256

<212> PRT

<213> Homo sapiens

<400> 1486

Xaa	Cys	Ser	Ala	Phe	Asn	Asp	Ile	Gly	Tyr	His	Tyr	Gly	Ala	Met	Val
1				5					10					15	
Val	Asp	Ala	Ala	Leu	Phe	Leu	Pro	Gln	Ser	Arg	Pro	Arg	Leu	Phe	Ile
			20					25					30		
Ile	Gly	Val	Arg	Asn	Asp	Ile	Phe	Val	Gly	Asp	Ile	Thr	Ser	Glu	Ser
		35				40					45				
Pro	Ser	Lys	Met	Trp	His	Thr	Arg	Thr	Leu	Leu	Asn	Ala	Tyr	Ser	Asn
	50				55						60				
Leu	Lys	Asp	Asp	Ala	Lys	Ser	Asn	Trp	Val	Trp	Trp	Asp	Leu	Pro	Met
65				70					75					80	
Pro	Ala	Gln	Arg	Lys	Ser	Ala	Phe	Ala	Asp	Leu	Ile	Glu	Glu	Asn	Pro
			85					90						95	
Ser	Ser	Val	Lys	Trp	His	Thr	Arg	Lys	Glu	Thr	Gln	Gln	Leu	Leu	Asp
		100						105					110		
Met	Met	Thr	Asp	Val	Asn	Leu	Ala	Lys	Val	Glu	Ala	Ala	Lys	Lys	Leu
	115					120					125				
Ser	Ile	Glu	Ser	Lys	Glu	Asn	Val	Val	Gly	Thr	Ile	Tyr	Lys	Arg	Thr
	130				135						140				
Arg	Thr	Asp	Ser	Phe	Gly	Val	Lys	Ala	Gln	Arg	Ala	Glu	Val	Arg	Phe
145				150					155					160	
Asp	Asp	Val	Ala	Gly	Cys	Leu	Arg	Thr	Pro	Gly	Gly	Gly	Ser	Ser	Arg
			165					170					175		
Gln	Val	Ile	Met	Val	Val	Asp	Asn	Gly	Thr	Val	Lys	Thr	Arg	Leu	Ile
		180					185					190			
Ser	Ser	Arg	Glu	Thr	Ala	Arg	Leu	Met	Gly	Leu	Pro	Asp	Glu	Tyr	Ile
	195					200						205			
Leu	Pro	Lys	Asn	Tyr	Asn	Glu	Ala	Tyr	His	Leu	Thr	Gly	Asp	Gly	Val

210	215	220
Val Val Pro Val Val Ser His Ile Ala Thr His Ile Phe Asp Pro Val		
225	230	235
Met Glu Arg Val Phe Glu Asp Ala Ala Gly Leu Leu Lys Gln Ile Ala		240
	245	250
		255

<210> 1487

<211> 823

<212> DNA

<213> Homo sapiens

<400> 1487

acgcgtgagg ggaggggatg ctgggcagat cttgtgaggg aaaattcagg aaggacctct
60
ccgagcaggt gacatttcag ctaaggctgg gaaggatgag gagaagtcag gaactccagg
120
catcagggaa tgctggggaa aaaaagcact ccaggcccag ggatcagcaa agcacaggat
180
gcctggggga acacacagcc tcagagcatt tgaggaacag aaaaggcaac gtgactaagc
240
ttcctggggc ggtgaggtca ggcagggagg tgggtgagag gtcattggggc cgcaggcaaa
300
cggccctccc tcccagtgcc ccacatgcag gccctggagc accaggagcg gggaggctcc
360
gtggtgtgtc ttcttgcaag tggcctgcct ttgggagcat cagcccttc ttctggggac
420
tgggagaggc cggcagtgag ggaagaatgg ccctcggtcg tgcgtagaga atgtagggga
480
cacagggcct ctacaggacc cagatcctga tcttgtcaga tctgcacgcc cgtgggaggg
540
tgctggcggc agaaacgcgt tgccataagc cttctcccca ctgcaggcag gtgtggtcag
600
gggacctcct tggagaacaa ggtgggggaa tttggcagct ttctcagcat ggcgtccatc
660
ccccctacat tcttggggca cccactgtag gccaggccct gtgccggatc tgatgatata
720
gtgatgacta agtcacagtc cctgcctctg agggccccc atgtgtccgg gacagccaag
780
caacccaata tggtaaaatc cagtgtcagg accnaggag aag
823

<210> 1488

<211> 149

<212> PRT

<213> Homo sapiens

<400> 1488

Met Leu Gly Arg Ser Cys Glu Gly Lys Phe Arg Lys Asp Leu Ser Glu		
1	5	10
Gln Val Thr Phe Gln Leu Arg Leu Gly Arg Met Arg Arg Ser Gln Glu		15
	20	25
Leu Gln Ala Ser Gly Asn Ala Gly Lys Lys His Ser Arg Pro Arg		30
	35	40
Asp Gln Gln Ser Thr Gly Cys Leu Gly Glu His Thr Ala Ser Glu His		45

```

      50      55      60
Leu Arg Asn Arg Lys Gly Asn Val Thr Lys Leu Pro Gly Ala Val Arg
65      70      75      80
Ser Gly Arg Glu Val Gly Ala Arg Ser Trp Gly Arg Arg Gln Thr Ala
      85      90      95
Leu Pro Pro Ser Ala Pro His Ala Gly Pro Gly Ala Pro Gly Ala Gly
      100      105      110
Arg Leu Arg Gly Val Ser Ser Cys Lys Trp Pro Ala Phe Gly Ser Ile
      115      120      125
Ser Pro Phe Ser Trp Gly Leu Gly Glu Ala Gly Ser Glu Gly Arg Met
      130      135      140
Ala Leu Gly Arg Ala
145

```

<210> 1489

<211> 342

<212> DNA

<213> Homo sapiens

<400> 1489

```

nnccagttca ccgtcaagct ggccgcggcc ggcgaaacaca atgtgcgcaa tgcgctggcc
60
gcgattgcct gcgcggtggg tgccggcatc aaccaggacg ccatcgtgcg cggcctcgaa
120
gccttcgccc cggtcggcgg acgtttgcag cgcaagcagg ccgccagcgg cgcgcccgtc
180
attgacgaca cccacaaccc caatcccaat tcaatgcgcc cggcgatcga cgtgctggcc
240
cgcgtaaccg cgccgcgcat cctggtggtg ggcgacatgg gcgaagtcgg cgcacaggga
300
aaagaatttc acgaagaaat cggggcttac gcacacacgc gt
342

```

<210> 1490

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1490

```

Xaa Gln Phe Thr Val Lys Leu Ala Ala Ala Gly Glu His Asn Val Arg
1      5      10      15
Asn Ala Leu Ala Ala Ile Ala Cys Ala Val Gly Ala Gly Ile Asn Gln
      20      25      30
Asp Ala Ile Val Arg Gly Leu Glu Ala Phe Ala Pro Val Gly Gly Arg
      35      40      45
Leu Gln Arg Lys Gln Ala Ala Ser Gly Ala Pro Val Ile Asp Asp Thr
      50      55      60
His Asn Pro Asn Pro Asn Ser Met Arg Pro Ala Ile Asp Val Leu Ala
65      70      75      80
Arg Val Pro Ala Pro Arg Ile Leu Val Val Gly Asp Met Gly Glu Val
      85      90      95
Gly Ala Gln Gly Lys Glu Phe His Glu Glu Ile Gly Ala Tyr Ala His
      100      105      110
Thr Arg

```


<210> 1491
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 1491
 ncctcggtgt tctcatagag ggctacggca tcgcgtttga actgttcgga gtacctggac
 60
 atgggggtag attacctttc ttcccagctc gactgggctg gatatacagg gtccaccaca
 120
 tggggggtcag gtcccactcc caaaggagta gccatcaccc acgagtcggc ggtcaatacg
 180
 attgtcgatg tcaacgaacg cctcgggggtg actccgaccg accggatatt ggggatttca
 240
 gagctaaact tcgatctatc ggtatacgac atcttcggga tgttcgcgcg gggtgctacc
 300
 ttggtgttgc catctccagc agacaaacgt gat
 333

<210> 1492
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1492
 Met Gly Val Asp Tyr Leu Ser Ser Gln Leu Asp Trp Ala Gly Tyr Gln
 1 5 10 15
 Val Ser Thr Thr Trp Gly Ser Gly Pro Thr Pro Lys Gly Val Ala Ile
 20 25 30
 Thr His Glu Ser Ala Val Asn Thr Ile Val Asp Val Asn Glu Arg Leu
 35 40 45
 Gly Val Thr Pro Thr Asp Arg Ile Leu Gly Ile Ser Glu Leu Asn Phe
 50 55 60
 Asp Leu Ser Val Tyr Asp Ile Phe Gly Met Phe Ala Arg Gly Ala Thr
 65 70 75 80
 Leu Val Leu Pro Ser Pro Ala Asp Lys Arg Asp
 85 90

<210> 1493
 <211> 1316
 <212> DNA
 <213> Homo sapiens

<400> 1493
 nggtaccagg gcaaagaagg ctggggcccc gcctcctacc taaagaagaa cagtggggag
 60
 cctttgcccc cgaagccagg ccctgggtca ccctcccacc cgggtgacct tgacttggat
 120
 ggtgtttccc ggcagcagaa cgcggtgggc agggagaagg agctgctcag cagccagagg
 180
 gacggggcgt ttgaaggccg cccggtgccc gacggtgacg ccaagcagag atcaccaaag
 240

atgaggcaga gacccccctcc tcgccggggac atgaccattc ctcgaggcct caacctgccc
 300
 aagccgcccc tcccccccca agtggaggaa gagtattaca ccatcgccga attccagaca
 360
 accatcccag acggcatcag cttccaggca ggcctgaagg tcgaggatgat cgagaaaaac
 420
 ttgagtggct ggtggtacat tcagattgaa gataaggaag ggtgggcccc ggccaccttc
 480
 attgacaagt acaagaagac gagcaacgcg tcgagaccca actttctggc tcccctgccc
 540
 cacgaggatga cccagctccg gctgggggaa gcagcagcgc tggagaacaa cacgggcagc
 600
 gaagccacgg gcccctcccg gcccctgcct gacgcaccgc atggtgtcat ggactcgggg
 660
 ttgccatggt ctaaagactg gaagggcagt aaggatgtcc tgaggaaggc atcttcagac
 720
 atgtctgctg cagcaggcta cgaggagatc tcagaccccg acatggagga gaagcccagc
 780
 ctccctccgc ggaaagaatc catcatcaag tcggaggggg agctgctgga gcgggagcgg
 840
 gagcggcaga ggacggagca gctccggggc cccactccca agcctccggg cgtgattttg
 900
 ccgatgatgc cagccaaaca catccctcca gcccgggaca gcaggaggcc agagcccaaa
 960
 cctgacaaaa gcagactgtt ccagctgaaa aatgacatgg ggctggagtg tggccacaag
 1020
 gtcttggcca aggaagtga gaagcccaac ctccggccca tctccaaatc caaaactgac
 1080
 ctgccagagg agaagccaga tgccactccc cagaatccct tcttgaagtc cagacctcag
 1140
 gttaggccaa aaccagctcc ttcccccaaa acggagccac ctcagggcga agaccaagtc
 1200
 gacatctgca acctcaggag taagctcagg cctgccaagt cccaagacaa gtccttgttg
 1260
 gatggggagg gccccaggc agtagggggc caagacgtgg ccttcagccg aagctt
 1316

<210> 1494

<211> 438

<212> PRT

<213> Homo sapiens

<400> 1494

Xaa	Tyr	Gln	Gly	Lys	Glu	Gly	Trp	Ala	Pro	Ala	Ser	Tyr	Leu	Lys	Lys
1				5					10					15	
Asn	Ser	Gly	Glu	Pro	Leu	Pro	Pro	Lys	Pro	Gly	Pro	Gly	Ser	Pro	Ser
			20					25					30		
His	Pro	Gly	Ala	Leu	Asp	Leu	Asp	Gly	Val	Ser	Arg	Gln	Gln	Asn	Ala
			35				40					45			
Val	Gly	Arg	Glu	Lys	Glu	Leu	Leu	Ser	Ser	Gln	Arg	Asp	Gly	Arg	Phe
	50					55					60				
Glu	Gly	Arg	Pro	Val	Pro	Asp	Gly	Asp	Ala	Lys	Gln	Arg	Ser	Pro	Lys
65					70					75				80	
Met	Arg	Gln	Arg	Pro	Pro	Pro	Arg	Arg	Asp	Met	Thr	Ile	Pro	Arg	Gly

```

      85              90              95
Leu Asn Leu Pro Lys Pro Pro Ile Pro Pro Gln Val Glu Glu Glu Tyr
      100              105              110
Tyr Thr Ile Ala Glu Phe Gln Thr Thr Ile Pro Asp Gly Ile Ser Phe
      115              120              125
Gln Ala Gly Leu Lys Val Glu Val Ile Glu Lys Asn Leu Ser Gly Trp
      130              135              140
Trp Tyr Ile Gln Ile Glu Asp Lys Glu Gly Trp Ala Pro Ala Thr Phe
      145              150              155
Ile Asp Lys Tyr Lys Lys Thr Ser Asn Ala Ser Arg Pro Asn Phe Leu
      165              170              175
Ala Pro Leu Pro His Glu Val Thr Gln Leu Arg Leu Gly Glu Ala Ala
      180              185              190
Ala Leu Glu Asn Asn Thr Gly Ser Glu Ala Thr Gly Pro Ser Arg Pro
      195              200              205
Leu Pro Asp Ala Pro His Gly Val Met Asp Ser Gly Leu Pro Trp Ser
      210              215              220
Lys Asp Trp Lys Gly Ser Lys Asp Val Leu Arg Lys Ala Ser Ser Asp
      225              230              235
Met Ser Ala Ser Ala Gly Tyr Glu Glu Ile Ser Asp Pro Asp Met Glu
      245              250              255
Glu Lys Pro Ser Leu Pro Pro Arg Lys Glu Ser Ile Ile Lys Ser Glu
      260              265              270
Gly Glu Leu Leu Glu Arg Glu Arg Glu Arg Gln Arg Thr Glu Gln Leu
      275              280              285
Arg Gly Pro Thr Pro Lys Pro Pro Gly Val Ile Leu Pro Met Met Pro
      290              295              300
Ala Lys His Ile Pro Pro Ala Arg Asp Ser Arg Arg Pro Glu Pro Lys
      305              310              315
Pro Asp Lys Ser Arg Leu Phe Gln Leu Lys Asn Asp Met Gly Leu Glu
      325              330              335
Cys Gly His Lys Val Leu Ala Lys Glu Val Lys Lys Pro Asn Leu Arg
      340              345              350
Pro Ile Ser Lys Ser Lys Thr Asp Leu Pro Glu Glu Lys Pro Asp Ala
      355              360              365
Thr Pro Gln Asn Pro Phe Leu Lys Ser Arg Pro Gln Val Arg Pro Lys
      370              375              380
Pro Ala Pro Ser Pro Lys Thr Glu Pro Pro Gln Gly Glu Asp Gln Val
      385              390              395
Asp Ile Cys Asn Leu Arg Ser Lys Leu Arg Pro Ala Lys Ser Gln Asp
      405              410              415
Lys Ser Leu Leu Asp Gly Glu Gly Pro Gln Ala Val Gly Gly Gln Asp
      420              425              430
Val Ala Phe Ser Arg Ser
      435

```

<210> 1495

<211> 329

<212> DNA

<213> Homo sapiens

<400> 1495

```

agatctctgt cccgtagagg tgccacctca tcctccatga gagctgtgct ttgctttctt
60

```

ctggaggctg caaggaggat ggccccatc aeggcggacc tacatgctgg gagtccggga
 120
 gagggcaggc cgcggacatg gggcatgtgg cgatgtgttt caccaccac tcccgcctga
 180
 agtgccactg tgagcccaac ccacggtgcc aggctgggct gcactccagg ctcttcgagc
 240
 agaccacct cctcagcctc ctccccctga aggctgggca tggcctggac aaaggggtgc
 300
 ctctctgct gtgccatgct gacgtggca
 329

<210> 1496
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 1496
 Met Ala Gln Gln Arg Arg Thr Pro Phe Val Gln Ala Met Pro Ser Leu
 1 5 10 15
 Gln Gly Lys Glu Ala Glu Glu Val Gly Leu Leu Gln Glu Pro Gly Val
 20 25 30
 Gln Pro Ser Leu Ala Pro Trp Val Gly Leu Thr Val Ala Leu Gln Ala
 35 40 45
 Gly Val Gly Gly Glu Thr His Arg His Met Pro His Val Arg Gly Leu
 50 55 60
 Pro Ser Pro Gly Leu Pro Ala Cys Arg Ser Ala Val Met Gly Ala Ile
 65 70 75 80
 Leu Leu Ala Ala Ser Arg Arg Lys Gln Ser Thr Ala Leu Met Glu Asp
 85 90 95
 Glu Val Ala Pro Leu Arg Asp Arg Asp
 100 105

<210> 1497
 <211> 345
 <212> DNA
 <213> Homo sapiens

<400> 1497
 naacttcttg cactcactca ggcgcacggt tggcggccga cttggaagcc gctgcagcac
 60
 ttgacgcggg gcgatctcga agcggttcggt cttggcctga cggtcgatgg ctgcggcgtg
 120
 ccgttgatcg gcggaatgcg acgggtgggg cagggcgtgc ggccgacacc accgcaagaa
 180
 cgcaactcac ggcagatgaa tctgttttga aacgcaagga agggtaatga caggcaccga
 240
 caagaagcgg atccccgcagc tgctgcgtgt tgagctcact gaacttaccg gcccgatcga
 300
 gcagccttac gcgcccgatg cacgtcattc tttcggggcca cgcgt
 345

<210> 1498
 <211> 104
 <212> PRT

<213> Homo sapiens

<400> 1498

```

Met Thr Cys Ile Gly Arg Val Arg Leu Leu Asp Arg Ala Gly Lys Phe
 1             5             10             15
Ser Glu Leu Asn Thr Gln Gln Leu Arg Asp Pro Leu Leu Val Gly Ala
          20             25             30
Cys His Tyr Pro Ser Leu Arg Phe Lys Thr Asp Ser Ser Ala Val Ser
      35             40             45
Cys Val Leu Ala Val Val Ser Ala Ala Arg Pro Ala Pro Pro Val Ala
      50             55             60
Phe Ala Arg Ser Thr Ala Arg Arg Ser His Arg Pro Ser Gly Gln Asp
65             70             75             80
Arg Thr Leu Arg Asp Arg Pro Ala Ser Ser Ala Ala Ala Ser Lys
          85             90             95
Ser Ala Ala Asn Arg Ala Pro Glu
          100

```

<210> 1499

<211> 402

<212> DNA

<213> Homo sapiens

<400> 1499

```

aaatatattc tgccagagtt tgaacacgac accatgctct ggcatttggg catgtcgggg
60
agtttccgtc tatgcgagag caatgaagaa ttacgcaaac atgaccatct aatcattcag
120
tttgaagata tcgaactgcg ttatcatgat cctcgccgtt ttggttgcat tctttggctg
180
gatgcacaat cacaaagcaa attaatagat acgctggggc cagaaccctt aagcgagaac
240
tttaatgctg agtattttatt tgaaaaattg aagaataaaa aggttggcac caaagttgca
300
attatggata accatgtggt ggtgggcgta ggcaatattt atgcgaccga aagtctgttt
360
aatctgggga ttcattccagc acaaccggcc tcgactttaa gc
402

```

<210> 1500

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1500

```

Lys Tyr Ile Leu Pro Glu Phe Glu His Asp Thr Met Leu Trp His Leu
 1             5             10             15
Gly Met Ser Gly Ser Phe Arg Leu Cys Glu Ser Asn Glu Glu Leu Arg
          20             25             30
Lys His Asp His Leu Ile Ile Gln Phe Glu Asp Ile Glu Leu Arg Tyr
      35             40             45
His Asp Pro Arg Arg Phe Gly Cys Ile Leu Trp Leu Asp Ala Gln Ser
      50             55             60
Gln Ser Lys Leu Ile Asp Thr Leu Gly Pro Glu Pro Leu Ser Glu Asn

```

```

65              70              75              80
Phe Asn Ala Glu Tyr Leu Phe Glu Lys Leu Lys Asn Lys Lys Val Gly
              85              90              95
Thr Lys Val Ala Ile Met Asp Asn His Val Val Val Gly Val Gly Asn
              100              105              110
Ile Tyr Ala Thr Glu Ser Leu Phe Asn Leu Gly Ile His Pro Ala Gln
              115              120              125
Pro Ala Ser Thr Leu Ser
              130

```

<210> 1501

<211> 362

<212> DNA

<213> Homo sapiens

<400> 1501

```

nnacgcgtgc atgctgcagg catcatccat cgcgatctga agccccaaaa catcttcctg
60
gtgccgagcg cgcgcgagcg cgacttcgtg aagatcttcg acttcggcgc atgccagatg
120
gtcacaccga aggtatcgaa cggcgtgccc gagctgaaga cgagcgcggg aaatctcttc
180
ggcacgggtgc cgtacatggc gccggagtgc ttcgaggacg gctcgcaccg gctggatgcg
240
cgcgcgggaca tctactccac gggcatcatc atgtaccgct gcgtgacggg gacgctcccc
300
ttcaaggcga acaccgtctt cgagatgctc atccatctgc gcgagggccg cccatcaagc
360
tt
362

```

<210> 1502

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1502

```

Xaa Arg Val His Ala Ala Gly Ile Ile His Arg Asp Leu Lys Pro Gln
 1              5              10              15
Asn Ile Phe Leu Val Pro Ser Ala Arg Glu Arg Asp Phe Val Lys Ile
              20              25              30
Phe Asp Phe Gly Ala Cys Gln Met Val Thr Pro Lys Val Ser Asn Gly
              35              40              45
Val Pro Glu Leu Lys Thr Ser Ala Gly Asn Leu Phe Gly Thr Val Pro
              50              55              60
Tyr Met Ala Pro Glu Cys Phe Glu Asp Gly Ser His Arg Leu Asp Ala
65              70              75              80
Arg Ala Asp Ile Tyr Ser Thr Gly Ile Ile Met Tyr Arg Cys Val Thr
              85              90              95
Gly Thr Leu Pro Phe Lys Ala Asn Thr Val Phe Glu Met Leu Ile His
              100              105              110
Leu Arg Glu Gly Arg Pro Ser Ser
              115              120

```

<210> 1503
 <211> 623
 <212> DNA
 <213> Homo sapiens

<400> 1503
 gccggcgtga ggcagagaaa cgtcctcgcc ctgtcattcc accctgaaga gactgacgac
 60
 gaccgggtac accgcacctg gttgcgccag gtgtctgagg aggtctgaca gttaccgcaa
 120
 ggggtcatga cgaccctccc tgaacactgt tcaaagggcg acggcttacc attcctcgct
 180
 gtgagtcctg aacagcagct tctcgaatat gaccgacgtc atgtctggca cccctacgcc
 240
 ccgacgatcg gggcagaccc aatgcttgca gtgacggctg ccaacggagt ctggctgcag
 300
 ctgcatgatg gggaacaccg ccacgaggtc atcgatgcga tggcctcgtg gtgggtgccag
 360
 attcacggtt accgaaaccc ggtcctcgac gaggccctca accgtcaaag ctcccagttc
 420
 agtcacgtca tgtttggcgg actcacccat aaggccgcgg ttgacgccgt catatcccta
 480
 gtgcgcctgg ccccgggggc cctcgaccgg atcttctctg ctgattccgg gtctgtcggc
 540
 gtcgaggtga gtctcaaatt ggctcgtcag gtgcaaatcg ctgcaccgc agcgcgcggc
 600
 ggcactttga cgaggacacg cgt
 623

<210> 1504
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 1504
 Met Thr Thr Pro Pro Glu His Cys Ser Lys Gly Asp Gly Leu Pro Phe
 1 5 10 15
 Leu Ala Val Ser Pro Glu Gln Gln Leu Leu Glu Tyr Asp Arg Arg His
 20 25 30
 Val Trp His Pro Tyr Ala Pro Thr Ile Gly Ala Asp Pro Met Leu Ala
 35 40 45
 Val Thr Ala Ala Asn Gly Val Trp Leu Gln Leu His Asp Gly Glu His
 50 55 60
 Arg His Glu Val Ile Asp Ala Met Ala Ser Trp Trp Cys Gln Ile His
 65 70 75 80
 Gly Tyr Arg Asn Pro Val Leu Asp Glu Ala Leu Asn Arg Gln Ser Ser
 85 90 95
 Gln Phe Ser His Val Met Phe Gly Gly Leu Thr His Lys Ala Ala Val
 100 105 110
 Asp Ala Val Ile Ser Leu Val Arg Leu Ala Pro Gly Pro Leu Asp Arg
 115 120 125
 Ile Phe Leu Ala Asp Ser Gly Ser Val Gly Val Glu Val Ser Leu Lys
 130 135 140
 Leu Ala Arg Gln Val Gln Ile Ala Arg Thr Ala Ala Arg Gly Gly Thr

160

```

<400> 1506
Met Ser Thr Leu Val Ser Ile Gly Leu Pro Asn Arg Trp Pro Gly Trp
  1          5          10          15
Pro Ala Pro Arg Arg Asn Trp Thr Thr Gly Ala Pro Lys Leu Ala Asp
      20          25          30
Gly Thr Lys Pro Ser Ser Pro Gly Ala Thr Thr Leu Ala Ser Xaa Met
      35          40          45
Thr Lys Leu Ser Gly Gly Ala Gln Arg Leu Ser Ala Asn Gly Gly Lys
      50          55          60
Leu Thr Asp Gly Val Ser Gln Leu Ser Gly Gly Leu Thr Thr Leu Ser
65          70          75          80
His Lys Gly Gln Gln Leu Ser Gln Gly Ala Asp Gly Leu Ala Ser Gly
      85          90          95
Val Ala Thr Tyr Thr Asp Gly Thr Gly Lys Val Val Asp Gly Ile Gly
      100          105          110
Gln Leu Ser Ala Gly Leu Thr Thr Met Asp Glu Lys Ile Ala Ala Ala
      115          120          125
Thr Gly Lys Ile Asp Pro Ser Gln Leu Asp Lys Leu Ala Gly Gly Ala

```



```

      130              135              140
Gly Gln Leu Ala Asp Gly Ile Asp Gln Phe Thr Gly Asn Leu Val Gly
145              150              155              160
Tyr Arg Thr Glu Ile Arg Gln Tyr Ala
      165

```

```

<210> 1507
<211> 667
<212> DNA
<213> Homo sapiens

```

```

<400> 1507
agatctctta agatgtgctc attatcatga gaacagcgtg gaggaaacca cccccaggat
60
ccagttacct ccacttgctc tgcccttggc acgtggggct tatggggatt acaattcaag
120
gtgagacttg ggtggggaca cagtggaaca tgaagtgtgc cacgctgggt ggatgacgcc
180
ctcctcccc cgccaccgag agctgcaggc cacatgattc cttttgggta gcactcggga
240
aagggcagaa tgtacaggaa cagagtgaga ttcgcagggc ctggggctga gggaggggac
300
gcactagagg aaggcaaagg ggagcctcct ggggtgtgggg agcactttct gtcttggttt
360
tggtggtggc tgcacagtgg ccacacccg tcagagctca cctgcctgca ccagggcctt
420
ccgtgcaccc tggcagccca gatgactgca ccagcccagg ggaggtggag gaatgccaca
480
cgcaccggta cctggggacc gggggtcctc ggtgatcatc ccgagctcca agacagaagc
540
tggtactacag ccgtgctgag tggaggggtt tggtggctgg gtgcccgcct cctattgctc
600
ctgcagactc tggggctctg ggcgccccca gtggggcaat gtgggctgct gcagggaact
660
cacgcgt
667

```

```

<210> 1508
<211> 139
<212> PRT
<213> Homo sapiens

```

```

<400> 1508
Met Tyr Arg Asn Arg Val Arg Phe Ala Gly Pro Gly Ala Glu Gly Gly
1      5      10      15
Asp Ala Leu Glu Glu Gly Lys Gly Glu Pro Pro Gly Cys Gly Glu His
20      25      30
Phe Leu Ser Trp Phe Trp Trp Trp Leu His Ser Gly Pro His Pro Ser
35      40      45
Glu Leu Thr Cys Leu His Pro Gly Pro Pro Cys Thr Leu Ala Ala Gln
50      55      60
Met Thr Ala Pro Ala Gln Gly Arg Trp Arg Asn Ala Thr Arg Thr Gly
65      70      75      80
Thr Trp Gly Pro Gly Val Leu Gly Asp His Pro Glu Leu Gln Asp Arg

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<210> 1509
<211> 463
<212> DNA
<213> Homo sapiens
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<210> 1510
<211> 99
<212> PRT
<213> Homo sapiens
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<210> 1511
<211> 633

<212> DNA

<213> Homo sapiens

<400> 1511

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 120
 ctggtagcgc aggctctcaa cgaccttgac catgacaagg tagtatccat tcttaccctg
 180
 ctctggaagt tcttcatcgc agtggccaca catacccac gtccgctat gagattcctg
 240
 tcacgaactc tgtcctcgtc tcgagacaag gacgaccatc ctgcacacac tccgggaggc
 300
 gaggcctgag atggccagcg tcaaaccac taaggaccgg ggccggtaca ccaatgatct
 360
 gtccgcccgc acgcggcagg cagcgaacat gcttctgctg cgtccttttg tgtggaaagt
 420
 cgtcaaagtg agcgtccacg gagccgacaa cctcgacggg ctgcacggtg ccttacgtcg
 480
 ccgtcgctaa ccattcctcc cacctcgacg cgcgcgtcgt ttttggggcc cttcccaagc
 540
 ggctgtcaaa gtacctagct accggggccg ctgctgacta tttcttcacc gtctggtgga
 600
 aggccatcgc tccggtgctc ttcttcaacg cgt
 633

<210> 1512

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1512

Ala	Gly	Thr	Gly	Val	Lys	Ala	Met	Ala	Leu	Gly	Pro	Gly	Trp	Val	His
1				5					10					15	
Thr	Glu	Phe	His	Ser	Arg	Ala	Asn	Val	Thr	Gly	Asn	His	Leu	Pro	Asp
			20					25					30		
Phe	Phe	Trp	Ile	Asp	Ala	Glu	Val	Leu	Val	Arg	Glu	Ala	Leu	Asn	Asp
			35					40					45		
Leu	Asp	His	Asp	Lys	Val	Val	Ser	Ile	Pro	Thr	Pro	Leu	Trp	Lys	Phe
	50					55					60				
Phe	Ile	Ala	Val	Ala	Thr	His	Thr	Pro	Arg	Ser	Ala	Met	Arg	Phe	Leu
65					70					75				80	
Ser	Arg	Thr	Leu	Ser	Ser	Ser	Arg	Asp	Lys	Asp	Asp	His	Pro	Arg	His
			85						90					95	
Thr	Pro	Gly	Gly	Glu	Ala										

<210> 1513

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1513

acgcgtgaag ggggtgaatt tcaccacaga ggggacgccg gggttcctgt tcagaaatat
 60
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 120
 gctgtttcgc aggaaccgcc actcccgtc cttgcggatc tgactctcca ggtcgtgctc
 180
 ttctgggatc ttcattgacgg gctgggtaaa atagccgggc gctccagtcg cagaaccccc
 240
 tctgcaccgt ggcggagatg aaacttttgt gtccagcagc atcgtccgcg tcgtccgcag
 300
 tctgctctgg gcccttgctg aacatcttcc gtgtccgggg gaactgggtgg gagtgggggg
 360
 tgtactgcgc ccagcgggg cctgtggtgc ccggccggcc g
 401

<210> 1514
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 1514
 Met Phe Asp Lys Gly Pro Glu Gln Thr Ala Asp Asp Ala Asp Asp Ala
 1 5 10 15
 Ala Gly His Lys Ser Phe Ile Ser Ala Thr Val Gln Thr Gly Phe Cys
 20 25 30
 Asp Trp Ser Ala Arg Leu Phe Tyr Pro Ala Arg His Glu Asp Pro Arg
 35 40 45
 Arg Ala Arg Pro Gly Glu Ser Asp Pro Gln Gly Ala Gly Val Ala Val
 50 55 60
 Pro Ala Lys Gln Pro Cys Gln Glu Ala Gly Pro Ala Ser His Ser Glu
 65 70 75 80
 Gly His Tyr Glu Ile Gly Arg Pro Asn Ile Ser Glu Gln Glu Pro Arg
 85 90 95
 Arg Pro Leu Cys Gly Glu Ile Pro Pro Leu His Ala
 100 105

<210> 1515
 <211> 720
 <212> DNA
 <213> Homo sapiens

<400> 1515
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 agggccatca cggcaggagt cgattatcac ggcccgatta tggaccacac gccggaatcc
 120
 aactacgagc ctgacctgac cgacgatgcg acgtcgggtc cgctcgccgt cgtcattgac
 180
 gatcccggcc cgcctacgcc tattgcgcgc cgccacgaca tcagcgaatc gggcatctat
 240
 gagacccatg tcaaagggtt aaccgcctt caccctctg ttcttgagca tcttcgcagc
 300
 acctatgccg ggcttgccct tccggctgtt atcgaacacc tcaagtcaat cggagtaaca
 360

gccatcgaac tactaccgt ccagcagttc gtctccgaac cattcatcgt tgggcgcggc
 420
 ttatccgatt actgggggta caacaccctg ggggttctttg cgccgcatgc tgcctactgc
 480
 tccgtcggct cgatgggaac ccaggtgcgc gagttcaagg acatggtgac gtctttccac
 540
 gaagccggca tcgaggtttt cctcgatgtc gtctacaacc aactggtga gggcgccat
 600
 gaaggaccga ctctgtcttt ccgcggcatc gatcacgagt cttattaccg cctcaccaac
 660
 gatcaccgca atgactatga cgtcaccggt tgtggcaatt ctgtcgacac ctcccatccg
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<210> 1516

<211> 240

<212> PRT

<213> Homo sapiens

<400> 1516

Xaa	Asp	Pro	Asp	Arg	Gly	Met	Arg	Phe	Asn	Pro	Ala	Lys	Leu	Leu	Leu
1				5					10				15		
Asp	Pro	Tyr	Ala	Arg	Ala	Ile	Thr	Ala	Gly	Val	Asp	Tyr	His	Gly	Pro
			20					25					30		
Ile	Met	Asp	His	Thr	Pro	Glu	Ser	Asn	Tyr	Glu	Pro	Asp	Leu	Thr	Asp
		35					40					45			
Asp	Ala	Thr	Ser	Val	Pro	Leu	Ala	Val	Val	Ile	Asp	Asp	Pro	Gly	Pro
	50					55				60					
Pro	Thr	Pro	Ile	Ala	Arg	Arg	His	Asp	Ile	Ser	Glu	Ser	Gly	Ile	Tyr
65					70				75					80	
Glu	Thr	His	Val	Lys	Gly	Leu	Thr	Arg	Leu	His	Pro	Leu	Val	Pro	Glu
			85					90					95		
His	Leu	Arg	Ser	Thr	Tyr	Ala	Gly	Leu	Ala	Tyr	Pro	Ala	Val	Ile	Glu
		100					105						110		
His	Leu	Lys	Ser	Ile	Gly	Val	Thr	Ala	Ile	Glu	Leu	Leu	Pro	Val	Gln
		115					120					125			
Gln	Phe	Val	Ser	Glu	Pro	Phe	Ile	Val	Gly	Arg	Gly	Leu	Ser	Asp	Tyr
	130					135				140					
Trp	Gly	Tyr	Asn	Thr	Leu	Gly	Phe	Phe	Ala	Pro	His	Ala	Ala	Tyr	Cys
145					150				155					160	
Ser	Val	Gly	Ser	Met	Gly	Thr	Gln	Val	Arg	Glu	Phe	Lys	Asp	Met	Val
			165					170					175		
Thr	Ser	Phe	His	Glu	Ala	Gly	Ile	Glu	Val	Phe	Leu	Asp	Val	Val	Tyr
		180					185						190		
Asn	His	Thr	Gly	Glu	Gly	Gly	His	Glu	Gly	Pro	Thr	Leu	Ser	Phe	Arg
		195					200					205			
Gly	Ile	Asp	His	Glu	Ser	Tyr	Tyr	Arg	Leu	Thr	Asn	Asp	His	Arg	Asn
	210					215				220					
Asp	Tyr	Asp	Val	Thr	Gly	Cys	Gly	Asn	Ser	Val	Asp	Thr	Ser	His	Pro
225					230					235				240	

<210> 1517

<211> 497

<212> DNA

<213> Homo sapiens

<400> 1517
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 120
 tccttttcca tcgggctgca agtactgttt ccattcctcc tggcaggctt tgggaccgtg
 180
 gctgctggca tgggtgttga catcgtgcag cactgggaag tcttccagaa ggtgacagag
 240
 gtcttcatcc tagtgctgc gctgctgggg ctcaaaggga acctggaaat gaccctggca
 300
 tcaaggcttt cactgcagc caacattgga cacatggaca cacccaagga gctctggcgg
 360
 atgatcactg ggaacatggc cctcatccag gtgcaggccc cggtgggtggg cttcctggcg
 420
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 480
 ttcctgctct gtggtag
 497

<210> 1518
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 1518
 Xaa Arg Val Lys Gly Val Arg Glu Glu Asp Ala Leu Leu Glu Asn Gly
 1 5 10 15
 Ser Gln Ser Asn Glu Ser Asp Asp Val Ser Thr Asp Arg Gly Pro Ala
 20 25 30
 Pro Pro Ser Pro Leu Lys Glu Thr Ser Phe Ser Ile Gly Leu Gln Val
 35 40 45
 Leu Phe Pro Phe Leu Leu Ala Gly Phe Gly Thr Val Ala Ala Gly Met
 50 55 60
 Val Leu Asp Ile Val Gln His Trp Glu Val Phe Gln Lys Val Thr Glu
 65 70 75 80
 Val Phe Ile Leu Val Pro Ala Leu Leu Gly Leu Lys Gly Asn Leu Glu
 85 90 95
 Met Thr Leu Ala Ser Arg Leu Ser Thr Ala Ala Asn Ile Gly His Met
 100 105 110
 Asp Thr Pro Lys Glu Leu Trp Arg Met Ile Thr Gly Asn Met Ala Leu
 115 120 125
 Ile Gln Val Gln Ala Pro Val Val Gly Phe Leu Ala Ser Ile Ala Ala
 130 135 140
 Val Val Phe Gly Trp Ile Pro Asp Gly His Phe Ser Ile Pro His Ala
 145 150 155 160
 Phe Leu Leu Cys Gly
 165

<210> 1519
 <211> 2076
 <212> DNA
 <213> Homo sapiens

<400> 1519
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gtgtgcaatg agatgttggg aaaatcccag tttgttgctt gtatggctac ttgtcattca
120
cttacaaaaa ttgaaggagt gctctctggg gatccacttg atctgaaaat gtttgaggct
180
attggatgga ttctggaaga agcaactgaa gaagaaacag cacttcataa tcgaattatg
240
cccacagtgg ttctgtctcc caaacaactg cttcctgaat ctaccctgc aggaaaccaa
300
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360
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420
gacgcctaca tgaagggagc gcccgaggcc attgccggtc tctgtaaacc tgaaacagtt
480
cctgtcgatt ttcaaaacgt tttggaagac ttcactaaac agggcttccg tgtgattgct
540
cttgcacaca gaaaattgga gtcaaaactg acatggcata aagtacagaa tattagcaga
600
gatgcaattg agaacaacat ggattttatg ggattaatta taatgcagaa caaattaaag
660
caagaaaccc ctgcagtact tgaagatttg cataaagcca acattcgcac cgtcatggtc
720
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780
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840
aattggcatt atgcagactc cctcacgcag tgcagtcac catcagcaat tgaccagag
900
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960
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1020
aagttgatgt tgcattggac cgtgtttgcc cgtatggcac ctgatcagaa gacacagttg
1080
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1140
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1320
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1380
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1440
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1500
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1560

gtcaaacagc aaccttggtg tgaagtgtgg catccaaaat cagatgcttg taatacaaca
 1620
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 1680
 atacaaaatt atgaaaatac cacagtgttt tttattttcca gttttcagta cctcatagtg
 1740
 gcaattgcct tttcaaaagg aaaacccttc aggcaacctt gctacaaaaa ttattttttt
 1800
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 1860
 tctgttgacc aggttcttca gatagtgtgt gtaccatata agtggcgtgt aactatgctc
 1920
 atcattgttc ttgtcaatgc ctttgtgtct atcacagtgg agaacttctt ccttgacatg
 1980
 gtccttttga aagttgtgtt caaccgagac aaacaaggag agtatcggtt cagcaccaca
 2040
 cagccaccgc aggagtcagt ggatcggtgg ggaaaa
 2076

<210> 1520
 <211> 692
 <212> PRT
 <213> Homo sapiens

<400> 1520
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 Pro Glu Glu Asn Val Cys Asn Glu Met Leu Val Lys Ser Gln Phe Val
 20 25 30
 Ala Cys Met Ala Thr Cys His Ser Leu Thr Lys Ile Glu Gly Val Leu
 35 40 45
 Ser Gly Asp Pro Leu Asp Leu Lys Met Phe Glu Ala Ile Gly Trp Ile
 50 55 60
 Leu Glu Glu Ala Thr Glu Glu Thr Ala Leu His Asn Arg Ile Met
 65 70 75 80
 Pro Thr Val Val Arg Pro Pro Lys Gln Leu Leu Pro Glu Ser Thr Pro
 85 90 95
 Ala Gly Asn Gln Glu Met Glu Leu Phe Glu Leu Pro Ala Thr Tyr Glu
 100 105 110
 Ile Gly Ile Val Arg Gln Phe Pro Phe Ser Ser Ala Leu Gln Arg Met
 115 120 125
 Ser Val Val Ala Arg Val Leu Gly Asp Arg Lys Met Asp Ala Tyr Met
 130 135 140
 Lys Gly Ala Pro Glu Ala Ile Ala Gly Leu Cys Lys Pro Glu Thr Val
 145 150 155 160
 Pro Val Asp Phe Gln Asn Val Leu Glu Asp Phe Thr Lys Gln Gly Phe
 165 170 175
 Arg Val Ile Ala Leu Ala His Arg Lys Leu Glu Ser Lys Leu Thr Trp
 180 185 190
 His Lys Val Gln Asn Ile Ser Arg Asp Ala Ile Glu Asn Asn Met Asp
 195 200 205
 Phe Met Gly Leu Ile Ile Met Gln Asn Lys Leu Lys Gln Glu Thr Pro
 210 215 220
 Ala Val Leu Glu Asp Leu His Lys Ala Asn Ile Arg Thr Val Met Val


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225                230                235                240
Thr Gly Asp Ser Met Leu Thr Ala Val Ser Val Ala Arg Asp Cys Gly
                245                250                255
Met Ile Leu Pro Gln Asp Lys Val Ile Ile Ala Glu Ala Leu Pro Pro
                260                265                270
Lys Asp Gly Lys Val Ala Lys Ile Asn Trp His Tyr Ala Asp Ser Leu
                275                280                285
Thr Gln Cys Ser His Pro Ser Ala Ile Asp Pro Glu Ala Ile Pro Val
                290                295                300
Lys Leu Val His Asp Ser Leu Glu Asp Leu Gln Met Thr Arg Tyr His
305                310                315                320
Phe Ala Met Asn Gly Lys Ser Phe Ser Val Ile Leu Glu His Phe Gln
                325                330                335
Asp Leu Val Pro Lys Leu Met Leu His Gly Thr Val Phe Ala Arg Met
                340                345                350
Ala Pro Asp Gln Lys Thr Gln Leu Ile Glu Ala Leu Gln Asn Val Asp
                355                360                365
Tyr Phe Val Gly Met Cys Gly Asp Gly Ala Asn Asp Cys Gly Ala Leu
370                375                380
Lys Arg Ala His Gly Gly Ile Ser Leu Ser Glu Leu Glu Ala Ser Val
385                390                395                400
Ala Ser Pro Phe Thr Ser Lys Thr Pro Ser Ile Ser Cys Val Pro Asn
                405                410                415
Leu Ile Arg Glu Gly Arg Ala Ala Leu Ile Thr Ser Phe Cys Val Phe
                420                425                430
Lys Phe Met Ala Leu Tyr Ser Ile Ile Gln Tyr Phe Ser Val Thr Leu
                435                440                445
Leu Tyr Ser Ile Leu Ser Asn Leu Gly Asp Phe Gln Phe Leu Phe Ile
450                455                460
Asp Leu Ala Ile Ile Leu Val Val Val Phe Thr Met Ser Leu Asn Pro
465                470                475                480
Ala Trp Lys Glu Leu Val Ala Gln Arg Pro Pro Ser Gly Leu Ile Ser
                485                490                495
Gly Ala Leu Leu Phe Ser Val Leu Ser Gln Ile Ile Ile Cys Ile Gly
                500                505                510
Phe Gln Ser Leu Gly Phe Phe Trp Val Lys Gln Gln Pro Trp Tyr Glu
                515                520                525
Val Trp His Pro Lys Ser Asp Ala Cys Asn Thr Thr Gly Ser Gly Phe
530                535                540
Trp Asn Ser Ser His Val Asp Asn Glu Thr Glu Leu Asp Glu His Asn
545                550                555                560
Ile Gln Asn Tyr Glu Asn Thr Thr Val Phe Phe Ile Ser Ser Phe Gln
                565                570                575
Tyr Leu Ile Val Ala Ile Ala Phe Ser Lys Gly Lys Pro Phe Arg Gln
                580                585                590
Pro Cys Tyr Lys Asn Tyr Phe Phe Val Phe Ser Val Ile Phe Leu Tyr
595                600                605
Ile Phe Ile Leu Phe Ile Met Leu Tyr Pro Val Ala Ser Val Asp Gln
610                615                620
Val Leu Gln Ile Val Cys Val Pro Tyr Gln Trp Arg Val Thr Met Leu
625                630                635                640
Ile Ile Val Leu Val Asn Ala Phe Val Ser Ile Thr Val Glu Asn Phe
                645                650                655
Phe Leu Asp Met Val Leu Trp Lys Val Val Phe Asn Arg Asp Lys Gln

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<210> 1521
<211> 373
<212> DNA
<213> Homo sapiens
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<210> 1522
<211> 94
<212> PRT
<213> Homo sapiens
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<210> 1523
<211> 525
<212> DNA
<213> Homo sapiens
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 aatatgcaag aagcatcgac tcagctggaa gactctctcc tggggaagat gctggagacg
 180
 tgtggagatg ctgagaatca gctggctctc gagctctccc agcacgaagt ctttggtgag
 240
 aaggagatcg tggaccctct gtacggcata gctgaggtgg agattcccaa catccagaag
 300
 cagaggaagc agcttgcaag attggtgtta gactgggatt cagtcagagc caggtggaac
 360
 caagctcaca aatcctcagg aaccaacttt caggggcttc catcaaaaat agatactcta
 420
 aaggaaggga tggatgaagc tggaaataaa gtagaacagt gcaaggatca acttgacgca
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 gacatgtaca actttatggc caaagaaggg gagtatggca aattt
 525

<210> 1524

<211> 175

<212> PRT

<213> Homo sapiens

<400> 1524

Xaa	Arg	Val	Arg	Ser	Ile	Cys	Arg	His	Ser	His	Lys	Arg	Leu	Val	Ala
1				5					10					15	
Cys	Phe	Gln	Gly	Gln	His	Gly	Thr	Asp	Ala	Glu	Arg	Arg	His	Lys	Lys
		20						25					30		
Leu	Pro	Leu	Thr	Ala	Leu	Ala	Gln	Asn	Met	Gln	Glu	Ala	Ser	Thr	Gln
		35					40					45			
Leu	Glu	Asp	Ser	Leu	Leu	Gly	Lys	Met	Leu	Glu	Thr	Cys	Gly	Asp	Ala
	50					55					60				
Glu	Asn	Gln	Leu	Ala	Leu	Glu	Leu	Ser	Gln	His	Glu	Val	Phe	Val	Glu
65			70						75					80	
Lys	Glu	Ile	Val	Asp	Pro	Leu	Tyr	Gly	Ile	Ala	Glu	Val	Glu	Ile	Pro
		85						90					95		
Asn	Ile	Gln	Lys	Gln	Arg	Lys	Gln	Leu	Ala	Arg	Leu	Val	Leu	Asp	Trp
		100					105					110			
Asp	Ser	Val	Arg	Ala	Arg	Trp	Asn	Gln	Ala	His	Lys	Ser	Ser	Gly	Thr
	115						120				125				
Asn	Phe	Gln	Gly	Leu	Pro	Ser	Lys	Ile	Asp	Thr	Leu	Lys	Glu	Gly	Met
	130					135					140				
Asp	Glu	Ala	Gly	Asn	Lys	Val	Glu	Gln	Cys	Lys	Asp	Gln	Leu	Ala	Ala
145				150					155					160	
Asp	Met	Tyr	Asn	Phe	Met	Ala	Lys	Glu	Gly	Glu	Tyr	Gly	Lys	Phe	
		165						170					175		

<210> 1525

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1525

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 120
 ctgcgttctt ccctggacta tgaatatgaa ctgccgatgg cccagatgaa ccggcggtta
 180
 tctggcatcg atacgggtctt tttgcttacc gatgaaaagt acggctacat cagctcatcg
 240
 ctgtgcaaac aggtcgcgca attcggcggt gaggtcacccg ggatgcttcg gac
 294

<210> 1526
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1526
 Val His Glu Arg Met Asp Leu Ile Arg Gln Ser Val Asp Ala Arg Ile
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 Asn Val Asp Tyr Trp Ser Gly Leu Leu Val Asp Tyr Thr Ser Gln His
 20 25 30
 Gly Val Asp Val Leu Val Lys Gly Leu Arg Ser Ser Leu Asp Tyr Glu
 35 40 45
 Tyr Glu Leu Pro Met Ala Gln Met Asn Arg Arg Leu Ser Gly Ile Asp
 50 55 60
 Thr Val Phe Leu Leu Thr Asp Glu Lys Tyr Gly Tyr Ile Ser Ser Ser
 65 70 75 80
 Leu Cys Lys Gln Val Ala Gln Phe Gly Gly Glu Val Thr Gly Met Leu
 85 90 95
 Arg Ile

<210> 1527
 <211> 371
 <212> DNA
 <213> Homo sapiens

<400> 1527
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 120
 acttcgccct ggtgcacggg gttggcatga ccggcgagta cccttgggtg gtgcaccgcg
 180
 aagacattga cgcgctgggt tacgacgggtg tggtcgaggc cggcatgacc atctgtgtgg
 240
 aaagctacat cggccacgac gacggcgggc aaggcgtgaa gtcgaagaa cagatctaca
 300
 tccacgaaca cagcatcgag ttgctctccg attatccgtt cgacccacgc ctgttgccgc
 360
 gctgaacgcg t
 371

<210> 1528
 <211> 109
 <212> PRT

<213> Homo sapiens

<400> 1528

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Met Glu Met Leu Lys Ala Gly Arg Ser Phe Lys Glu Tyr Ala Glu Met
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Ala Trp Lys Ile Pro Glu His Tyr Lys Asn Asn Arg Tyr Phe Ala Leu
          20           25           30
Val His Gly Val Gly Met Thr Gly Glu Tyr Pro Trp Val Val His Arg
          35           40           45
Glu Asp Ile Asp Ala Leu Gly Tyr Asp Gly Val Phe Glu Ala Gly Met
          50           55           60
Thr Ile Cys Val Glu Ser Tyr Ile Gly His Asp Asp Gly Gly Glu Gly
65           70           75           80
Val Lys Leu Glu Glu Gln Ile Tyr Ile His Glu His Ser Ile Glu Leu
          85           90           95
Leu Ser Asp Tyr Pro Phe Asp Pro Arg Leu Leu Pro Arg
          100          105

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<210> 1529

<211> 609

<212> DNA

<213> Homo sapiens

<400> 1529

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nacgcgtggt gctcaccctc cgtgtgactc gcgctctgtc cggctcaggg ctgcacctcc
60
gtgggacttg cgtctgtgcc ggctcagggc tcgccctccg tgggacttgc gctctgtccg
120
gctcagggct cgcctccgtg gggacttgcg ctctgtccgg ctcagggctc gccctccgtg
180
ggacttgccg tctgtccggc tcagggctcg cctccgtggg gacttgcgct ctgtccggct
240
cagggctcgc cctccgtggg acttgcgctc tgtccggctc agggctcgcc ctccgtggga
300
tttgcgtct gtctggctca ggctgcgcag ggcaatggag gaacctcccg agcaggccca
360
gcggctcctt ccaccagcc cccatctccg gccggccatt tgtgaggccc tctgccactg
420
aggtgcactg tttccaattc ctcatcaca agctctacct tccacgagcc cagagcatga
480
acgcattcgg ccattggtct caccactctg cgaggagcac agcctcttct ccaccgtcca
540
atagcgtgtt cctcctttcc caggcctcac agaatgctct gtccgcatcc toccagcatt
600
ccattcacg
609

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<210> 1530

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1530

```

Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala Leu

```

1	5	10	15												
Cys	Pro	Ala	Gln	Gly	Ser	Pro	Ser	Val	Gly	Leu	Ala	Leu	Cys	Pro	Ala
	20	25	30												
Gln	Gly	Ser	Pro	Ser	Val	Gly	Leu	Ala	Leu	Cys	Pro	Ala	Gln	Gly	Ser
	35	40	45												
Pro	Ser	Val	Gly	Leu	Ala	Leu	Cys	Pro	Ala	Gln	Gly	Ser	Pro	Ser	Val
	50	55	60												
Gly	Leu	Ala	Leu	Cys	Pro	Ala	Gln	Gly	Ser	Pro	Ser	Val	Gly	Leu	Ala
65		70						75					80		
Leu	Cys	Pro	Ala	Gln	Gly	Ser	Pro	Ser	Val	Gly	Phe	Ala	Leu	Cys	Leu
	85	90						95							
Ala	Gln	Ala	Ala	Gln	Gly	Asn	Gly	Gly	Thr	Ser	Arg	Ala	Gly	Pro	Ala
	100	105						110							
Ala	Pro	Ser	Thr	Gln	Pro	Pro	Ser	Pro	Ala	Gly	His	Leu			
	115	120						125							

<210> 1531
 <211> 726
 <212> DNA
 <213> Homo sapiens

<400> 1531
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 agcggttgac tgggacgccg acgctgaaaa agaagctgac gagtccttgg gggcgcccgc
 120
 acattcggca agcatgagga cggggagcat cgagaccgcg acagctcggc gaaggaattt
 180
 cggggtggca ggcattggca aactagcttt ctgtgatcgg cgtgcgcggc cgggcaacaa
 240
 cagggcgtcg tcaggtggtc ttcgggctcg acttcgtctc cgttcccggc accttcccag
 300
 tgcgcatggc caggtgggtc aagtcggggc ggatcagtc taccgctgcg ctcatgctcg
 360
 gcttttcacc ggattccagc gctgggtgtg tcaccagcaa cctgacgcga ggatttttagc
 420
 acccccttcg cataccgcta tccagggcct ccacgacagc ggcaccgatg acgatcgcgt
 480
 tcaccgagcg cggcgttttc ggcagcttcc acatggggat cagaccatat tgatgcactg
 540
 gcgatccctt catacgcgag ccgccgatat ggcccccgag tgaggccctt cagttcgcgc
 600
 tgacgcatgc cgctctgcgc agcctgccaa cgctttcccg caacctcacc acacgtttgc
 660
 cgggttcggg gctggcgacg tgagccgtgt cacaagttca cgagctggct caccgctccg
 720
 cgagag
 726

<210> 1532
 <211> 178
 <212> PRT
 <213> Homo sapiens

<400> 1532

Met Val Ile Gly Pro Ala Leu Asp Trp Asp Ala Asp Ala Glu Lys Glu
 1 5 10 15
 Ala Asp Glu Ser Leu Gly Ala Pro Ala His Ser Ala Ser Met Arg Thr
 20 25 30
 Gly Ser Ile Glu Thr Ala Thr Ala Arg Arg Arg Asn Phe Gly Val Ala
 35 40 45
 Gly Met Ala Lys Leu Ala Phe Cys Asp Arg Arg Ala Arg Pro Gly Asn
 50 55 60
 Asn Arg Ala Ser Ser Gly Gly Leu Arg Ala Arg Leu Arg Leu Arg Ser
 65 70 75 80
 Arg His Leu Pro Ser Ala His Gly Gln Val Val Gln Val Gly Ala Asp
 85 90 95
 Gln Ser Tyr Arg Cys Ala Gln Leu Arg Leu Phe Thr Gly Phe Gln Arg
 100 105 110
 Trp Cys Gly His Gln Gln Pro Asp Ala Arg Ile Leu Ala Pro Pro Ser
 115 120 125
 His Thr Ala Ile Gln Gly Leu His Asp Ser Gly Thr Asp Asp Asp Arg
 130 135 140
 Val His Arg Ala Arg Arg Phe Arg Gln Leu Pro His Gly Asp Gln Thr
 145 150 155 160
 Ile Leu Met His Trp Arg Ser Leu His Thr Arg Ala Ala Asp Met Ala
 165 170 175
 Pro Glu

<210> 1533

<211> 364

<212> DNA

<213> Homo sapiens

<400> 1533

natatgctgg tcgatcatgt gcatcagatc gtccagtggc cggagcgcgg ctggctggcg
 60
 gagattattc acagcgaacg ggcgaccggc ggtgcgccgc ttaacgtcct gctgacgctg
 120
 gttaaaatgc acgtcggcct gccgttgacg gcggtcggtc ttatcggcga agacagcgat
 180
 ggcgattaca ttatggcgat gctcgaccag taccacgtca atcgccagcg ggtacagcgc
 240
 accacgtttg cccccacgtc gatgtcgacg gtgatgaccg atcccactgg gcagcgcacc
 300
 tttttccatt cgcttgcgc caatcgctg ctcgatctcc ccgcctttga tcgactcgac
 360
 gcgt
 364

<210> 1534

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1534

Xaa Met Leu Val Asp His Val His Gln Ile Val Gln Trp Pro Glu Arg

```

      1           5           10           15
Gly Trp Leu Ala Glu Ile Ile His Ser Glu Arg Ala Thr Gly Gly Ala
      20           25           30
Pro Leu Asn Val Leu Leu Thr Leu Val Lys Met His Val Gly Leu Pro
      35           40           45
Leu Gln Ala Val Gly Leu Ile Gly Glu Asp Ser Asp Gly Asp Tyr Ile
      50           55           60
Met Ala Met Leu Asp Gln Tyr His Val Asn Arg Gln Arg Val Gln Arg
      65           70           75           80
Thr Thr Phe Ala Pro Thr Ser Met Ser Gln Val Met Thr Asp Pro Thr
      85           90           95
Gly Gln Arg Thr Phe Phe His Ser Pro Ala Ala Asn Arg Leu Leu Asp
      100          105          110
Leu Pro Ala Phe Asp Arg Leu Asp Ala
      115          120

```

<210> 1535
 <211> 369
 <212> DNA
 <213> Homo sapiens

```

<400> 1535
gaattcgggg ggctccggga atgaagtttc catttcgcaa gccttctgaa gcaaataccgc
60
caatccctgg ggcccgcggt gcgtgccggc cagcggccag tcctggcccc gaatgatcca
120
ctcgatatct tcggcagaca acgccagcag accggggccta tcgcccgggc ccatggctgc
180
aaaaaaaaactc ttcacagtct ggacattccc ttgtgtgctc atcgaaatct ctccatgtcc
240
tttacctggg atcgtgtccg atctcatcgg acgcgttgag gacctgctgg tgaggacggg
300
gtgtcgggtga ttcagccgat atcgactttg catggcgatg tcccagctgc cggagccggt
360
actggccac
369

```

<210> 1536
 <211> 111
 <212> PRT
 <213> Homo sapiens

```

<400> 1536
Met Gln Ser Arg Tyr Arg Leu Asn His Arg His Pro Val Leu Thr Ser
      1           5           10           15
Arg Ser Ser Thr Arg Pro Met Arg Ser Asp Thr Ile Pro Gly Lys Gly
      20           25           30
His Gly Glu Ile Ser Met Ser Thr Gln Gly Asn Val Gln Thr Val Lys
      35           40           45
Ser Phe Phe Ala Ala Met Gly Arg Gly Asp Arg Pro Gly Leu Leu Ala
      50           55           60
Leu Ser Ala Glu Asp Ile Glu Trp Ile Ile Pro Gly Gln Asp Trp Pro
      65           70           75           80
Leu Ala Gly Thr His Arg Gly Pro Gln Gly Leu Ala Asp Leu Leu Gln

```


	85		90		95									
Lys	Ala	Cys	Glu	Met	Glu	Thr	Ser	Phe	Pro	Glu	Pro	Pro	Glu	Phe
		100					105						110	

<210> 1537

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1537

```

ccactcgcgg cgcctcctga gccctctcgt gtgtcaggac gccagcatcc tggtcgtggt
60
ctcggggctg ctgcacgtgt accagcggaa gatcggcagc caggaggaca cctgcttggt
120
cctcacgcgc cccggggaga tgggtggcca gctggccgtg ctcaccgagg agacctcgtc
180
ggcgtggtgg agacactgac ccaccaggcc cgggcgacca cgggtgcatgc cgttcgggac
240
tcagaattgg ccaagctgcc ggcaggagcc ctcacgtcca tcaagcgag gtac
294

```

<210> 1538

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1538

Pro	Leu	Ala	Ala	Pro	Pro	Glu	Pro	Ser	Arg	Val	Ser	Gly	Arg	Gln	His
1				5				10					15		
Pro	Val	Arg	Val	Leu	Gly	Ala	Ala	Ala	Arg	Val	Pro	Ala	Glu	Asp	Arg
		20					25					30			
Gln	Pro	Gly	Gly	His	Leu	Leu	Val	Pro	His	Ala	Pro	Arg	Gly	Asp	Gly
	35				40						45				
Gly	Pro	Ala	Gly	Arg	Ala	His	Arg	Gly	Asp	Leu	Val	Gly	Val	Val	Glu
	50				55					60					
Thr	Leu	Thr	His	Gln	Ala	Arg	Ala	Thr	Thr	Val	His	Ala	Val	Arg	Asp
65				70						75				80	
Ser	Glu	Leu	Ala	Lys	Leu	Pro	Ala	Gly	Ala	Leu	Thr	Ser	Ile	Lys	Arg
			85					90						95	

Arg Tyr

<210> 1539

<211> 1015

<212> DNA

<213> Homo sapiens

<400> 1539

```

acgcgttcgg gcgtcaggca cagcatctc aacagatgtg gctgacaccc aaggcagtcg
60
gcctcagtgc cctgtcaccc acctagaacc tggtcacagc atgtcatccg ggctgctctg
120
gccttgactg gacatgatta tttatcctta cacaccgtgg ctgctctaca ggccaagaaa
180

```

caggctgctc agccagggtc aggagaaggt gggtcaggct ccccggggac ctcaggccct
 240
 gacgcatect ggccacccc taggcctcct ctgtcggggc agcctggctc agcagagccc
 300
 gggacacacg gctgaggcca cccaggctgg gccatcttgc ccctgttttg tgccccctac
 360
 tcagttctcc ttctgtcctg gctcagggtc aggccagtca agaggggtggc tgagaagcag
 420
 gaggagcctc agagaccctc ccctcgaaag cactggggct tccacctcac aagcggcagg
 480
 ttcgcttttg gagctgctgg tccatcgccc aggcctggcc aggggcaggc gaggatcctg
 540
 gttgccgac catcgctccag gctgggccc ggagccggtg aggaacctgg ggctgtgtg
 600
 caggggtcgc cgtctccagc tctctgccgt ggtgagggga ttgtgctgtg tgcacaccac
 660
 ctggctgcat cgaatccac catggcccag aggggtggacc tgtggctcct tggggggcca
 720
 gcatccccag tetaatgggt gccctgccca ctctcctgag ttcccggtga gagtcccc
 780
 caacacctca gccttcacct ttctcagtta atcaaaagat tccaaaaaaa gcaaaccat
 840
 cagaacggct tctccaccg agtggtcagg ataaataatc atgtccagtc aaggccagag
 900
 cagcccggtat gacatgctat gaacaggttt taggtgggtg acagggcact gaggccgact
 960
 gccttgggtg tcagccacat ctgttgagat gcgtgtgcct gacgcccgaa cgcgt
 1015

<210> 1540
 <211> 89
 <212> PRT
 <213> Homo sapiens

<400> 1540
 His Pro Arg Gln Ser Ala Ser Val Pro Cys His Pro Pro Arg Thr Cys
 1 5 10 15
 Ser Gln His Val Ile Arg Ala Ala Leu Ala Leu Thr Gly His Asp Tyr
 20 25 30
 Leu Ser Leu His Thr Val Ala Ala Leu Gln Ala Lys Lys Gln Ala Ala
 35 40 45
 Gln Pro Gly Ser Gly Glu Gly Gly Ser Gly Ser Pro Gly Thr Ser Gly
 50 55 60
 Pro Asp Ala Ser Trp Pro His Pro Arg Pro Pro Leu Ser Gly Gln Pro
 65 70 75 80
 Gly Ser Ala Glu Pro Gly Thr His Gly
 85

<210> 1541
 <211> 1482
 <212> DNA
 <213> Homo sapiens

<400> 1541

cgccgatcac ggggagcccc tcgactgcct cccagaacaa agtgggaaaag ggaagcttag
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cccgccgctg ccgcctccga gcagcccgcc aggactctgg ctactggaga tgggcgccccg
120
gctatcgagg cgacgggtgc cggcggaccc gtccctggcc ctggacgcgc tgcccccgga
180
gctgctggtg caggtgctga gccacgtgcc ggccacgctc cttggacacg cgatgccgcc
240
cagtgtgccg cgcttggcgc gacatagtgg acgggcccac tgggaggctg ctgcaactgg
300
cccgcgaccg cagcgcggag ggccgagcac tctacgcagt ggctcaacgc tgccctgccc
360
acaacgaaga caaagaggag ttcccgtgtg gcgccctggc gcgctactga ctgcgcgcgc
420
ccttcggccg caatctcatc ttcaactcct gcggagagca gggcttcaga ggctgggagg
480
tggagcatgg cgggaacggc tgggccatag aaaagaacct aacaccggtg cctggggctc
540
cttcgcagac ctgcttcgtg acctctttcg aatggtgctc caagaggcag cttgtggacc
600
tggatgatga aggggtgtgg caggagctgc tggacagcgc ccagattgag atctgtgtgg
660
ctgactggtg gggcgctcga gagaactgcg gctgcgtcta ccagctccgg gtccgccttc
720
tggatgtgta tgaaaaggaa gtggtcaagt tctcagcctc acctgacctg gtccttcagt
780
ggactgagag gggctgccga caggtctccc acgtcttcac caactttggc aagggcatcc
840
gtacgtatc ttttgagcag tacgggagag acgtgagttc ctgggtgggg cactatggcg
900
cccttgtgac ccactccagt gtgagggtca ggatccgtct gtcctagcga ctggactact
960
gcctgacgtt gtcagtcaag accagccttg cagccagggt cagtgggtca cacctgtggg
1020
atcctccac tttggccttc caaaatgttg cgattatagg cgtgagccac tgtggctggc
1080
ctgaaatctt ctagtatcca cattcataaa gtaaaaagaa aataaaaagg catagaatgt
1140
caagctaacc aggcgtccgc tacttcagaa gagtgtactg tcgcatgggg agtctgtaac
1200
catgcttttc acttccactg catctctcgc tggctcaaaa cagcagaggt gtgtccattg
1260
gacaacagag agtgggaatt ccaaaagtat gggcactagg aaaagacttc ttccatcaag
1320
cttaattgtt ttgttattca tttaatgact ttccctgctg ttacctaatt acaaattgga
1380
tggaactgtg tttttttctg ctttgttttt tcagtttgct gtttctgtag ccatattgta
1440
ttctgtgtca aataaagtcc agttggattc tggaaaaaaa aa
1482

<210> 1542

<211> 57

<212> PRT

<213> Homo sapiens

<400> 1542

```

Lys Gly Ile Glu Cys Gln Ala Asn Gln Ala Ser Ala Thr Ser Glu Glu
 1             5             10             15
Cys Thr Val Ala Trp Gly Val Cys Asn His Ala Phe His Phe His Cys
          20             25             30
Ile Ser Arg Trp Leu Lys Thr Arg Gln Val Cys Pro Leu Asp Asn Arg
          35             40             45
Glu Trp Glu Phe Gln Lys Tyr Gly His
          50             55

```

<210> 1543

<211> 311

<212> DNA

<213> Homo sapiens

<400> 1543

```

gctagcgatg ctactttaag gtagcggaag ttggatgctg acgttgccctc ctatcggttg
60
gagtcaaacg gacgaacaag cgttcgaggt agctttaaat gcgggcgacg ccagaaagtt
120
accaaagtcg gtgccgcgcc ttatgtttct cgaatggctc acgcgccgag gctacttgct
180
ccacggctcg agccgagccg acctcgtttg ttttgaacct cgagcaccca aagacttcag
240
ccctgacgag ttcagcaaac gcaccgcggt ttctgcctct tcagatgggg tgtggccccc
300
cncnccccnc c
311

```

<210> 1544

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1544

```

Met Arg Ser Trp Met Leu Thr Leu Pro Pro Ile Gly Trp Ser Gln Thr
 1             5             10             15
Asp Glu Gln Ala Phe Glu Val Ala Leu Asn Ala Gly Asp Ala Arg Lys
          20             25             30
Leu Pro Lys Ser Val Pro Arg Leu Met Phe Leu Glu Trp Leu Thr Arg
          35             40             45
Arg Gly Tyr Leu Leu His Gly Ser Ser Arg Ala Asp Leu Val Cys Phe
          50             55             60
Glu Pro Arg Ala Pro Lys Asp Phe Ser Pro Asp Glu Phe Ser Lys Arg
          65             70             75             80
Thr Ala Val Phe Ala Ser Ser Asp Gly Val Trp Pro Pro Xaa Xaa Xaa
          85             90             95

```

<210> 1545

<211> 362

<212> DNA

<213> Homo sapiens

<400> 1545
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 60
 caacagtagt tggcgaatcc ttcgatggtc aagtcctgtg agcttgctca tctgacggat
 120
 cgtctctgtc tcaagcacct cgctgtttc caggttcaag gcctggatag tgcgagtgtc
 180
 gtactgggtcg atcacttcca ccgagtggtc tgggtagccc ctgcccattc gctttatgat
 240
 ctcaaccata gatgcatttg gcatgttcca gagcttgtag tccttaacga tctctctggc
 300
 gtcgtagaaa accttcacgc tatcgtcagg atgggtcact gtggtgatgt accgtccaga
 360
 ac
 362

<210> 1546
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 1546
 Met Val Lys Ser Cys Glu Leu Ala His Leu Thr Asp Arg Leu Cys Leu
 1 5 10 15
 Lys His Leu Ala Cys Phe Gln Val Gln Gly Leu Asp Ser Ala Ser Val
 20 25 30
 Val Leu Val Asp His Phe His Arg Val Val Trp Val Ala Pro Cys His
 35 40 45
 Ser Leu Tyr Asp Leu Asn His Arg Cys Ile Trp His Val Pro Glu Leu
 50 55 60
 Val Leu Leu Asn Asp Leu Ser Gly Val Val Glu Asn Leu His Ala Ile
 65 70 75 80
 Val Arg Met Gly His Cys Gly Asp Val Pro Ser Arg
 85 90

<210> 1547
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 1547
 cgcgttgcca caccggaaga cccggccagc tcacgcctgg gtgaaagttt ctgggcgttc
 60
 ctgccgcgtt cgggtgtggt cagcgccgtg tcggcgtgga acctggagcg cgagcgctg
 120
 cgcaaactcg gcctgccggc ctggcactgg aagaacgccg tgctcagtgc ctggatgtac
 180
 agcgtggtgt tgtggggggt gatgattgtc tggttgggcg cggcggtgat tccgttcctg
 240
 atcattcagg gtgtctacgg gttctcgttg ctggaagtgg tcaactacgt cgagcactac
 300
 gggcttaaac gccagaagtt gcccaacggt cgttatgaac ggtgttcgcc tcggcactcg
 360

tggaacagca accggattgt caccaatatc tttctgttcc aacttcagcg gcattccgac
 420
 caccatgcc
 429

<210> 1548
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 1548
 Arg Val Ala Thr Pro Glu Asp Pro Ala Ser Ser Arg Leu Gly Glu Ser
 1 5 10 15
 Phe Trp Ala Phe Leu Pro Arg Ser Val Trp Phe Ser Ala Val Ser Ala
 20 25 30
 Trp Asn Leu Glu Arg Glu Arg Leu Arg Lys Leu Gly Leu Pro Ala Trp
 35 40 45
 His Trp Lys Asn Ala Val Leu Ser Ala Trp Met Tyr Ser Val Val Leu
 50 55 60
 Trp Gly Val Met Ile Val Trp Leu Gly Ala Ala Val Ile Pro Phe Leu
 65 70 75 80
 Ile Ile Gln Gly Val Tyr Gly Phe Ser Leu Leu Glu Val Val Asn Tyr
 85 90 95
 Val Glu His Tyr Gly Leu Lys Arg Gln Lys Leu Pro Asn Gly Arg Tyr
 100 105 110
 Glu Arg Cys Ser Pro Arg His Ser Trp Asn Ser Asn Arg Ile Val Thr
 115 120 125
 Asn Ile Phe Leu Phe Gln Leu Gln Arg His Ser Asp His His Ala
 130 135 140

<210> 1549
 <211> 443
 <212> DNA
 <213> Homo sapiens

<400> 1549
 gtcgacaggc tccagggttc tgttttgtag tgcaccgct gtggtgcaac atgcgtctgg
 60
 gcacaccagc gtcgccggtt tcctgttgta gtctttcctc tctgactcca ggggtattgg
 120
 gtctttctgc cagcgcccat gcaactttgg cagcctggcc tgtctgctgg taagtggggc
 180
 agaatccctg cactccacca ttcttgggca aactccctc taggattttg gtctcccttt
 240
 tctctctggg ctttgaccac cgctaccag caaactcctc catctagacc agccagcatt
 300
 ggtttcttcc actccccag ctgccgctg ggaggcgcca ctgcaaactt ccctgggggc
 360
 tcccagctgc tcagagatcc ccattgccctt ccctgatcag ctccctgccc ggttctcatc
 420
 ccgacgcggc tgcattggata ttc
 443

<210> 1550

<211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1550
 Met Arg Thr Gly Gln Gly Ala Asp Gln Gly Arg Ala Trp Gly Ser Leu
 1 5 10 15
 Ser Ser Trp Glu Thr Pro Gly Lys Phe Ala Val Ala Pro Pro Thr Arg
 20 25 30
 Gln Leu Gly Glu Trp Lys Lys Pro Met Leu Ala Gly Leu Asp Gly Gly
 35 40 45
 Val Cys Trp Val Ala Val Val Lys Asp Gln Arg Glu Lys Gly Asp Gln
 50 55 60
 Asn Pro Arg Gly Ser Val Ala Gln Glu Trp Trp Ser Ala Gly Ile Leu
 65 70 75 80
 Pro His Leu Pro Ala Asp Arg Pro Gly Cys Gln Ser Cys Met Gly Ala
 85 90 95
 Gly Arg Lys Thr Gln Tyr Pro Trp Ser Gln Arg Gly Lys Thr Thr
 100 105 110
 Gly Asn Gly Arg Arg Trp Cys Ala Gln Thr His Val Ala Pro Gln Arg
 115 120 125
 Val His Tyr Lys Thr Glu Pro Trp Ser Leu Ser
 130 135

<210> 1551
 <211> 306
 <212> DNA
 <213> Homo sapiens

<400> 1551
 ccatggatac cccacctctg gcactcaaca tgacttggct gccacacacc aggaaacctc
 60
 agaggagcag ccagctggcc aagcaccctt gccctgccc tgcgggctcc acaaaagctg
 120
 gaggagcaaa cgcagctcac ctctttttct gtccactgct tcagggccta cccctgtgct
 180
 ttggagatgg aacaaaagtg agagagctcc ctgacacacc ctcccagggc gaggatggca
 240
 gctccttctt ccatttggtc ctaacacagc ctccccagga gaccaggggc atcccnnnnc
 300
 ccnnc
 306

<210> 1552
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 1552
 Met Asp Thr Pro Pro Leu Ala Leu Asn Met Thr Trp Leu Pro His Thr
 1 5 10 15
 Arg Lys Pro Gln Arg Ser Ser Gln Leu Ala Lys His Pro Cys Pro Cys
 20 25 30
 Pro Ala Gly Ser Thr Lys Ala Gly Gly Ala Asn Ala Ala His Leu Phe

```

          35          40          45
Phe Cys Pro Leu Leu Gln Gly Leu Pro Leu Cys Phe Gly Asp Gly Thr
          50          55          60
Lys Val Arg Glu Leu Pro Asp Thr Pro Ser Gln Gly Glu Asp Gly Ser
65          70          75          80
Ser Phe Leu His Leu Val Leu Thr Gln Pro Pro Gln Glu Thr Arg Gly
          85          90          95
Ile Pro Xaa Pro Xaa
          100

```

<210> 1553

<211> 657

<212> DNA

<213> Homo sapiens

<400> 1553

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atcctgcaga atgatggcgt ggtcaccagc ccctattccc ggccacgcaa ggcgggccac
60
acgtactca tcctgggggg ccagaccttc atgtgtgaca agatctacca ggtggaccac
120
aaggccaagg agatcatccc caaggccgac ctgcccagcc cccggaagga gttcagcgcc
180
tcagcgatcg gctgcaaggt ctatgtgacg gggggcaggg gctccgagaa cgggggtctcc
240
aaggatgtct ggggtgtacga caccgtacat gaggaatggt ccaaggcggc gcccattgctg
300
attgcccgtt ttggccatgg ctcagctgag ctggagaact gcctctatgt ggtgggggga
360
cacacatccc tggcaggggt cttcccggcc tcgccttctg tctccctgaa acaagtggag
420
aaatacgacc ctggggccaa caagtggatg atggtggccc ccttgcgga tggcgtcagc
480
aatgccgcag tggtgagtgc caagtgaag ctctttgttt ttggaggaac cagcatccac
540
cgggacatgg tgtccaaggt ccagtgtat gaccctcgg agaacaggtg gacgatcaag
600
gccgagtgcc cccagccttg gcggtacaca gccgtgccg tcctgggcag ccagatc
657

```

<210> 1554

<211> 219

<212> PRT

<213> Homo sapiens

<400> 1554

```

Ile Leu Gln Asn Asp Gly Val Val Thr Ser Pro Tyr Ser Arg Pro Arg
1          5          10          15
Lys Ala Gly His Thr Leu Leu Ile Leu Gly Gly Gln Thr Phe Met Cys
20          25          30
Asp Lys Ile Tyr Gln Val Asp His Lys Ala Lys Glu Ile Ile Pro Lys
35          40          45
Ala Asp Leu Pro Ser Pro Arg Lys Glu Phe Ser Ala Ser Ala Ile Gly
50          55          60
Cys Lys Val Tyr Val Thr Gly Gly Arg Gly Ser Glu Asn Gly Val Ser

```



```

65          70          75          80
Lys Asp Val Trp Val Tyr Asp Thr Val His Glu Glu Trp Ser Lys Ala
      85          90          95
Ala Pro Met Leu Ile Ala Arg Phe Gly His Gly Ser Ala Glu Leu Glu
      100          105          110
Asn Cys Leu Tyr Val Val Gly Gly His Thr Ser Leu Ala Gly Val Phe
      115          120          125
Pro Ala Ser Pro Ser Val Ser Leu Lys Gln Val Glu Lys Tyr Asp Pro
      130          135          140
Gly Ala Asn Lys Trp Met Met Val Ala Pro Leu Arg Asp Gly Val Ser
145          150          155          160
Asn Ala Ala Val Val Ser Ala Lys Leu Lys Leu Phe Val Phe Gly Gly
      165          170          175
Thr Ser Ile His Arg Asp Met Val Ser Lys Val Gln Cys Tyr Asp Pro
      180          185          190
Ser Glu Asn Arg Trp Thr Ile Lys Ala Glu Cys Pro Gln Pro Trp Arg
      195          200          205
Tyr Thr Ala Ala Ala Val Leu Gly Ser Gln Ile
      210          215

```

<210> 1555

<211> 328

<212> DNA

<213> Homo sapiens

<400> 1555

```

acgcgtggga gctcgggaga gaggactctg cttctggggg ttgaagggtga gcgtgattct
60
ggaggagcct gccttgcggc gacggtgtgt tgtggagagg atgcaggaca tgagtgatcc
120
tgtaaggggtg atcgagtgtg cctcgtgaag tctggaagtc agcgagtgtg ggccgtggag
180
gtgagccacc ggtttgtgat ttgaaactga gtgagagtgc tgtggagcgc gaaatatgtg
240
tgtgtgtaga gtggaggtga gcgaatttgt gtgcatgtga gacggacgca atggcagagt
300
gtagcatcct gtgttgggat tgggattn
328

```

<210> 1556

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1556

```

Met Leu His Ser Ala Ile Ala Ser Val Ser His Ala His Lys Phe Ala
1      5      10      15
His Leu His Ser Thr His Thr His Ile Ser Arg Ser Thr Ala Leu Ser
20      25      30
Leu Ser Phe Lys Ser Gln Thr Gly Gly Ser Pro Pro Arg Pro Thr Leu
35      40      45
Ala Asp Phe Gln Thr Ser Arg Gly Thr Leu Asp His Pro Tyr Arg Ile
50      55      60
Thr His Val Leu His Pro Leu His Asn Thr Arg Ser Pro Gln Gly Arg

```

```
<210> 1557
<211> 390
<212> DNA
<213> Homo sapiens
```

```
<210> 1558
<211> 114
<212> PRT
<213> Homo sapiens
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```
<210> 1559
<211> 556
<212> DNA
<213> Homo sapiens
```

<400> 1559

accggtggcg acggtatcgg tggcgcgctg atccttgccg cggaatcctt cgctgcagag
60
ggtgagtcga agcgacccag cgtccagggtg ggcgaccggt tcatggagaa gctgctcatc
120
gagtgcaccc ttgacctctt caacgccggg gtagttgagg ccttgagga tttcggtgcc
180
gccggaatct cctgtgccac ctccgagctg gccagtgtg gcgacgggtg catgcacgtc
240
gagctcgacc gcgttccgct gcgcgaccgg aacctcgccc ctgaagagat cctcatgagc
300
gagtcccagg agcggatggc cgcgggtggtg cgccccgac agcttgaccg cttcatggag
360
atctgcgccc attgggggtgt cgctgccact gtcattggcg aggtcaccga caccggtcga
420
cttcacattg attggcaggg cgagcggatt gtcgacgtcg atccgcggac ggttgctcac
480
gacggaccgg ttctcgacat gccggccgcc cgtccgtggt ggattgatga gctcaacgag
540
aacgacgcta acgctg
556

<210> 1560

<211> 185

<212> PRT

<213> Homo sapiens

<400> 1560

Thr	Gly	Gly	Asp	Gly	Ile	Gly	Gly	Ala	Ser	Ile	Leu	Ala	Ser	Glu	Ser
1				5					10					15	
Phe	Ala	Ala	Glu	Gly	Glu	Ser	Lys	Arg	Pro	Ser	Val	Gln	Val	Gly	Asp
			20					25					30		
Pro	Phe	Met	Glu	Lys	Leu	Leu	Ile	Glu	Cys	Thr	Leu	Asp	Leu	Phe	Asn
		35					40					45			
Ala	Gly	Val	Val	Glu	Ala	Leu	Gln	Asp	Phe	Gly	Ala	Ala	Gly	Ile	Ser
	50					55					60				
Cys	Ala	Thr	Ser	Glu	Leu	Ala	Ser	Ala	Gly	Asp	Gly	Gly	Met	His	Val
65					70					75				80	
Glu	Leu	Asp	Arg	Val	Pro	Leu	Arg	Asp	Pro	Asn	Leu	Ala	Pro	Glu	Glu
			85						90					95	
Ile	Leu	Met	Ser	Glu	Ser	Gln	Glu	Arg	Met	Ala	Ala	Val	Val	Arg	Pro
			100					105					110		
Asp	Gln	Leu	Asp	Arg	Phe	Met	Glu	Ile	Cys	Ala	His	Trp	Gly	Val	Ala
		115					120					125			
Ala	Thr	Val	Ile	Gly	Glu	Val	Thr	Asp	Thr	Gly	Arg	Leu	His	Ile	Asp
	130					135					140				
Trp	Gln	Gly	Glu	Arg	Ile	Val	Asp	Val	Asp	Pro	Arg	Thr	Val	Ala	His
145					150					155				160	
Asp	Gly	Pro	Val	Leu	Asp	Met	Pro	Ala	Ala	Arg	Pro	Trp	Trp	Ile	Asp
			165					170						175	
Glu	Leu	Asn	Glu	Asn	Asp	Ala	Asn	Ala							
			180					185							

<210> 1561
 <211> 466
 <212> DNA
 <213> Homo sapiens

<400> 1561
 acgcgtgaaa ggtttgagag aagagagatg ccgctattga atctgctgga gttttacatc
 60
 ccaagatgaa gacagcattc agaattgatg tgatttcctt gaatgtggct taggaaatgt
 120
 ggacacttaa aactctcact tgaaattggg cacaggtttg atgtagagat aaggacgggg
 180
 tgcggaatgg agaccattt tgcattgat tcatctgacc gataaggcca tagtgcagtt
 240
 aggtgatatt cgaaagcttc tttgatgctc tttatgtata tgttggaagg aactaccagg
 300
 cgttgcttta aattcccaat gtgttgtttc gttactacta atttaatacc gtaagctcta
 360
 ggtaaagttc catgttgttg aactctgact gttctctttg gaattgaacg ttttgcattc
 420
 tcctcctgtg gctttaggtc tgacattgta tttgaccttt actagt
 466

<210> 1562
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1562
 Met Ser Asp Leu Lys Pro Gln Glu Glu Asp Ala Lys Arg Ser Ile Pro
 1 5 10 15
 Lys Arg Thr Val Arg Val Gln Gln His Gly Thr Leu Pro Arg Ala Tyr
 20 25 30
 Gly Ile Lys Leu Val Val Thr Lys Gln His Ile Gly Asn Leu Lys Gln
 35 40 45
 Arg Leu Val Val Pro Ser Asn Ile Tyr Ile Lys Ser Ile Lys Glu Ala
 50 55 60
 Phe Glu Tyr His Leu Thr Ala Leu Trp Pro Tyr Arg Ser Asp Glu Ser
 65 70 75 80
 Met Thr Lys Trp Val Ser Ile Pro His Pro Val Leu Ile Ser Thr Ser
 85 90 95
 Asn Leu Cys Pro Ile Ser Ser Glu Ser Phe Lys Cys Pro His Phe Leu
 100 105 110
 Ser His Ile Gln Gly Asn His Ile Asn Ser Glu Cys Cys Leu His Leu
 115 120 125
 Gly Met
 130

<210> 1563
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 1563

ctgggggggtg tggtcggcct gctgtcgggtg tacttgccgc gttggctgca tgaaacaccg
 60
 atcttcgctg agatgcagca gcgcaaaacc ctggctgccg agttgccatt gcgcgcggta
 120
 ttgcgtgacc accgtggcgc catcgtgctg tcgatgctgt tgacgtgggt gctgtcggcg
 180
 ggtgtgggtg tggtcacccct gatgaccccg accgtgctgc aaaccgtcta ccacttcagc
 240
 ccgacgggtg cgctgcaagc caacagcctg gcgatcgta cgctgagcct gggctgcatt
 300
 gcgtccggcg cgctggctga ccgttttggg gccggtcgcg ttttggtcac cggttggcgt
 360
 tgctgctggc cacttcctgg acgctgtatc acagcctgat ggcccagacg gaatggttga
 420
 ataagtgtac gcgt
 434

<210> 1564

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1564

Leu	Gly	Gly	Val	Phe	Gly	Leu	Leu	Ser	Val	Tyr	Leu	Pro	Arg	Trp	Leu
1			5					10					15		
His	Glu	Thr	Pro	Ile	Phe	Ala	Glu	Met	Gln	Gln	Arg	Lys	Thr	Leu	Ala
			20					25					30		
Ala	Glu	Leu	Pro	Leu	Arg	Ala	Val	Leu	Arg	Asp	His	Arg	Gly	Ala	Ile
			35				40					45			
Val	Leu	Ser	Met	Leu	Leu	Thr	Trp	Leu	Leu	Ser	Ala	Gly	Val	Val	Val
			50			55				60					
Val	Ile	Leu	Met	Thr	Pro	Thr	Val	Leu	Gln	Thr	Val	Tyr	His	Phe	Ser
65					70				75					80	
Pro	Thr	Val	Ala	Leu	Gln	Ala	Asn	Ser	Leu	Ala	Ile	Val	Thr	Leu	Ser
			85					90					95		
Leu	Gly	Cys	Ile	Ala	Ser	Gly	Ala	Leu	Ala	Asp	Arg	Phe	Gly	Ala	Gly
			100					105					110		
Arg	Val	Leu	Val	Thr	Gly	Trp	Arg	Cys	Cys	Trp	Pro	Leu	Pro	Gly	Arg
			115				120					125			
Cys	Ile	Thr	Ala												
			130												

<210> 1565

<211> 373

<212> DNA

<213> Homo sapiens

<400> 1565

ccatggctcgt agcccttggt tcaacaagag ccgtctactg acgctaacc accatgagcc
 60
 agagggtgag cggttctggc acctactgga ccatgaaagc aataaagagg acaagggagc
 120
 ctgcattcgg ccatttcttc ccaagaatca ccataaaggt tgtcaaaatc aaggaccctg
 180

atccggtgat tctcgaagtc atcgatgagc agaacaagtt tacccccgag ggagaaaagc
 240
 ggggtggtgct cttgatgctc gacaacctct accgtcccag taccaccgt gcattggcga
 300
 acggggggcgt cccttatctg cggtcgaaga gtgtcactgt tgacctcgta gacagccggg
 360
 acaacacggg tac
 373

<210> 1566
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1566
 Met Ser Gln Arg Val Ser Gly Ser Gly Thr Tyr Trp Thr Met Lys Ala
 1 5 10 15
 Ile Lys Arg Thr Arg Glu Pro Ala Phe Gly His Phe Phe Pro Arg Ile
 20 25 30
 Thr Ile Lys Val Val Lys Ile Lys Asp Pro Asp Pro Val Ile Leu Glu
 35 40 45
 Val Ile Asp Glu Gln Asn Lys Phe Thr Pro Glu Gly Glu Lys Arg Val
 50 55 60
 Val Leu Leu Met Leu Asp Asn Leu Tyr Arg Pro Ser Thr His Arg Ala
 65 70 75 80
 Leu Ala Asn Gly Gly Val Pro Tyr Leu Arg Ser Lys Ser Val Thr Val
 85 90 95
 Asp Leu Val Asp Ser Arg Asp Asn Thr Gly
 100 105

<210> 1567
 <211> 917
 <212> DNA
 <213> Homo sapiens

<400> 1567
 agcttttttcg accgctgaag gagggtggata cccgctcccc agacactccc tttctagggg
 60
 aagccgctgc actcctgggg gaccagttt gatgcctcca ggaggataag tctgaagccg
 120
 gggtgggaag ggagcggaga ggcccaaaca gaggcagcagg cagcgccctc tgctggcacc
 180
 ctggagacag cttcggctgc gggggccctg ctttctagtc ctccccagct ttcaggacac
 240
 cttgacaacc tggggtcctt gcagaagtgg cccggctgtc cccaagtct cctgaagcta
 300
 tctgggtagg gtgggaggca gtgctgtgag ccacaaatgc aaagcagagg ggacagatgt
 360
 tgggactcaa agacatgagg tagagctggc cccatgggta ggtgccacca ccagagccca
 420
 tgaggcttcg tgttctagaa ggtggtgggt tagtgccgca ctgagggcgt gtccgggagg
 480
 gagcatgtgt caccagggtc caggaaacag catgagtcac gacgcggggg tgtttaaggc
 540

attcgtgcc aagcggggac ctccggagcta tgccttgata aggcaagtga gggtacatgt
 600
 acgatgatgc gggtttgtgct gcagactgga aaaaagcagg ggctttgtcc tctcctgacc
 660
 ccttcacact ctgccttcac ggtaggctcc tgagaggggg gtctccaagg aggggtgtcag
 720
 tactgcagct tcagctggcg tggatggggg gcttacagga gcagcagggc tgagggagat
 780
 gacagcagta cgaatcgtgg ctctcctgag gcctgggttt cctcatatgt aaaatggggg
 840
 ttgcattaga ccataccctt ggctgtgtt taggcaaata gggatgaaag tggggccaag
 900
 ggctgaagag ctgggtc
 917

<210> 1568
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1568
 Met Gly Pro Ala Leu Pro His Val Phe Glu Ser Gln His Leu Ser Pro
 1 5 10 15
 Leu Leu Cys Ile Cys Gly Ser Gln His Cys Leu Pro Pro Tyr Pro Asp
 20 25 30
 Ser Phe Arg Arg Leu Gly Gly Gln Pro Gly His Phe Cys Arg Asp Pro
 35 40 45
 Arg Leu Ser Arg Cys Pro Glu Ser Trp Gly Gly Leu Glu Gly Arg Gly
 50 55 60
 Pro Ala Ala Glu Ala Val Ser Arg Val Pro Ala Glu Gly Ala Ala Cys
 65 70 75 80
 Cys Ser Val Trp Ala Ser Pro Leu Pro Ser Gln Pro Gly Phe Arg Leu
 85 90 95
 Ile Leu Leu Glu Ala Ser Asn Trp Val Pro Gln Glu Cys Ser Gly Phe
 100 105 110
 Pro

<210> 1569
 <211> 379
 <212> DNA
 <213> Homo sapiens

<400> 1569
 ggagggcctg tgattctact gcaggcaggc acccccaca acctcacatg ccgggccttc
 60
 aatgcgaagc ctgctgccac catcatctgg ttccgggacg ggacgcagca ggagggcgct
 120
 gtggccagca cggaattgct gaaggatggg aagagggaga ccaccgtgag ccaactgctt
 180
 attaacccca cggacctgga catagggcgt gtcttcactt gccgaagcat gaacgaagcc
 240
 atccctagtg gcaaggagac ttccatcgag ctggatgtgc accaccctcc tacagtgacc
 300

ctgtccattg agccacagac ggtgcaggag ggtgagcgtg ttgtctttac ctgccaggcc
 360
 acagccaacc cggagatct
 379

<210> 1570
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 1570
 Gly Gly Pro Val Ile Leu Leu Gln Ala Gly Thr Pro His Asn Leu Thr
 1 5 10 15
 Cys Arg Ala Phe Asn Ala Lys Pro Ala Ala Thr Ile Ile Trp Phe Arg
 20 25 30
 Asp Gly Thr Gln Gln Glu Gly Ala Val Ala Ser Thr Glu Leu Leu Lys
 35 40 45
 Asp Gly Lys Arg Glu Thr Thr Val Ser Gln Leu Leu Ile Asn Pro Thr
 50 55 60
 Asp Leu Asp Ile Gly Arg Val Phe Thr Cys Arg Ser Met Asn Glu Ala
 65 70 75 80
 Ile Pro Ser Gly Lys Glu Thr Ser Ile Glu Leu Asp Val His His Pro
 85 90 95
 Pro Thr Val Thr Leu Ser Ile Glu Pro Gln Thr Val Gln Glu Gly Glu
 100 105 110
 Arg Val Val Phe Thr Cys Gln Ala Thr Ala Asn Pro Glu Ile
 115 120 125

<210> 1571
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 1571
 tgcgcacttt tccgctcccc atgggtcccc tggncgttga tcatgcccc gatgttcac
 60
 atcggcatct tcttcttctt gccaaagcggc caagccgtgc tccagtcttt ccagatggaa
 120
 gatgcgttcg gcatgtcgac cgaatggggtc ggattggaca acttccgcaa cctgctggat
 180
 gacccacact acctgaattc cttccagcgc accgccgtgt tctcgggtgt ggtggcaggg
 240
 gtcgggatcg ccgtgtcact ggggtctggcg atctttgccg accccatcac tccgtcgcca
 300
 tgtgtacaag acacactgct gatcgtgccc tacgccgtgg cacccatgat cgccggc
 357

<210> 1572
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1572
 Cys Ala Leu Phe Arg Ser Arg Trp Val Pro Trp Xaa Leu Ile Met Pro


```

      1             5             10             15
Gln Met Phe Ile Ile Gly Ile Phe Phe Phe Leu Pro Ser Gly Gln Ala
      20             25             30
Val Leu Gln Ser Phe Gln Met Glu Asp Ala Phe Gly Met Ser Thr Glu
      35             40             45
Trp Val Gly Leu Asp Asn Phe Arg Asn Leu Leu Asp Asp Pro Thr Tyr
      50             55             60
Leu Asn Ser Phe Gln Arg Thr Ala Val Phe Ser Val Leu Val Ala Gly
65             70             75             80
Val Gly Ile Ala Val Ser Leu Gly Leu Ala Ile Phe Ala Asp Pro Ile
      85             90             95
Thr Pro Ser Pro Cys Val Gln Asp Thr Leu Leu Ile Val Pro Tyr Ala
      100            105            110
Val Ala Pro Met Ile Ala Gly
      115

```

<210> 1573
 <211> 337
 <212> DNA
 <213> Homo sapiens

```

<400> 1573
gaattcccat tgcacatctga ttccatgtct ggaaagaggg aagagagaca tcatgcagaa
60
tattgtacag attttggaat cggtagcagtt gaaatgggaa ctttttcaga gctggacaga
120
cttttcaagg ctccatcttt ctaataaact ggccattttt ggaattgggtt ataacacccg
180
ttggaaagag gatatccggt accattatgc tgagatcagc tcccaggtgc cccttgga
240
gcgacttcgg gactacttca actctgagaa gcctgaagga cggatcatta tgacccgagt
300
gcagaaaatg aactggaaaa atgtttacta caaat
337

```

<210> 1574
 <211> 95
 <212> PRT
 <213> Homo sapiens

```

<400> 1574
Met Gln Asn Ile Val Gln Ile Leu Glu Ser Val Gln Leu Lys Trp Glu
      1             5             10             15
Leu Phe Gln Ser Trp Thr Asp Phe Ser Arg Leu His Leu Ser Asn Lys
      20             25             30
Leu Ala Ile Phe Gly Ile Gly Tyr Asn Thr Arg Trp Lys Glu Asp Ile
      35             40             45
Arg Tyr His Tyr Ala Glu Ile Ser Ser Gln Val Pro Leu Gly Lys Arg
      50             55             60
Leu Arg Glu Tyr Phe Asn Ser Glu Lys Pro Glu Gly Arg Ile Ile Met
65             70             75             80
Thr Arg Val Gln Lys Met Asn Trp Lys Asn Val Tyr Tyr Lys Phe
      85             90             95

```

<210> 1575
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 1575
 nnacgcgtca gagagatctg tgtgtcggga ggggtgcccc tcatcattga tgaccgcgta
 60
 catctcgttg ccgaaattgg ggccgatggt gtccatgttg ggcagtctga catgccggtc
 120
 gaccaggccc gtgcgattct gggcgacgat ctactcatcg gcttgcccgc tcagactccc
 180
 gcccattgtg aggcgcacct gtcccagggg cgtgacatcg tcgactatct gggagttggg
 240
 gccctgcatt gtactggaac caaacctgag gctggggagc tcggcctggc tgagattcgt
 300
 gatgtcgtca acgccagccc gtggccgggt tgcgtcatcg gtggggtag cgcattccgat
 360
 gctcaagacg tagccccggg gggatgtgac ggcctgagcg tcgtctcggc gatttgccgg
 420
 agtaccgacc ccaagtccag tgcacgggaa cttgcggagg cgtggcgtag g
 471

<210> 1576
 <211> 157
 <212> PRT
 <213> Homo sapiens

<400> 1576
 Xaa Arg Val Arg Glu Ile Cys Val Ser Gly Gly Val Pro Leu Ile Ile
 1 5 10 15
 Asp Asp Arg Val His Leu Val Ala Glu Ile Gly Ala Asp Gly Val His
 20 25 30
 Val Gly Gln Ser Asp Met Pro Val Asp Gln Ala Arg Ala Ile Leu Gly
 35 40 45
 Asp Asp Leu Leu Ile Gly Leu Ser Ala Gln Thr Pro Ala His Val Glu
 50 55 60
 Ala Ala Leu Ser Gln Gly Arg Asp Ile Val Asp Tyr Leu Gly Val Gly
 65 70 75 80
 Ala Leu His Gly Thr Gly Thr Lys Pro Glu Ala Gly Glu Leu Gly Leu
 85 90 95
 Ala Glu Ile Arg Asp Val Val Asn Ala Ser Pro Trp Pro Val Cys Val
 100 105 110
 Ile Gly Gly Val Ser Ala Ser Asp Ala Gln Asp Val Ala Arg Val Gly
 115 120 125
 Cys Asp Gly Leu Ser Val Val Ser Ala Ile Cys Arg Ser Thr Asp Pro
 130 135 140
 Lys Ser Ser Ala Arg Glu Leu Ala Glu Ala Trp Arg Thr
 145 150 155

<210> 1577
 <211> 287
 <212> DNA
 <213> Homo sapiens

<400> 1577

ctcgtcctcc agcgtccgat cagtgcgtc aggatgctga tcggcgcccc cttgcgcac
 60
 ccccatcctg cgggcttgcg cacggttgcg ctcaaccg gcgtcgcgca cgcgcgcacc
 120
 ttgcgcgttg ccggggcagg cttccccgct cgcggccagc gcgccgccg cgatctggtg
 180
 atcgagctgg agccgatgct gccgcaggcg cccgacaagc aactgcacgc gctgatcgag
 240
 cagctcgacg tggcgctcgg gaagagcgcg acacgccatt ttccgga
 287

<210> 1578

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1578

Leu	Val	Leu	Gln	Arg	Pro	Ile	Ser	Ala	Leu	Arg	Met	Leu	Ile	Gly	Gly
1				5					10					15	
Pro	Leu	Arg	Ile	Pro	His	Pro	Ala	Gly	Leu	Arg	Thr	Val	Ala	Leu	Glu
			20					25					30		
Pro	Gly	Val	Ala	His	Ala	Arg	Thr	Leu	Arg	Val	Ala	Gly	Ala	Gly	Phe
		35					40					45			
Pro	Ala	Arg	Gly	Gln	Arg	Ala	Ala	Gly	Asp	Leu	Val	Ile	Glu	Leu	Glu
	50					55				60					
Pro	Met	Leu	Pro	Gln	Ala	Pro	Asp	Lys	Gln	Leu	His	Ala	Leu	Ile	Glu
65				70					75					80	
Gln	Leu	Asp	Val	Ala	Leu	Gly	Lys	Ser	Ala	Thr	Arg	His	Phe	Pro	
			85						90					95	

<210> 1579

<211> 2829

<212> DNA

<213> Homo sapiens

<400> 1579

ngggcgggg agcggacttc ctctctgag ggccgtgccg cgctgccaga ttgtttcttc
 60
 cgccccctgcc tccgcggctc ggaggcgagc ggaagggtgcc ccggggccga ggcccgtgac
 120
 ggggcgggcg ggagcccccg cagtccgggg tcgccggcga gggccatgct gctgttgggg
 180
 gaccctgtac aggcctgcc gccctcgcc gccccacgg ggccgtgct cgcctccg
 240
 gccggcgca ccctcaaccg cctgcgggag ccgctgctgc ggaggctcag cgagctcctg
 300
 gatcaggcgc ccgagggccg gggctggagg agactggcgg agctggcggg gagtgcgggg
 360
 cgcctccgcc tcagttgcct agacctggag cagtgttctc ttaaggtact ggagcctgaa
 420
 ggaagcccca gcctgtgtct gctgaagtta atgggtgaaa aagggtgcac agtcacagaa
 480

ttgagtgatt tccctgcaggc tatggaacac actgaagttc ttcagcttct cagcccccca
540
ggaataaaga ttactgtaaa cccagagtca aaggcagtct tggctggaca gtttgtgaaa
600
ctgtgttgcc gggcaactgg acatcctttt gttcaatatc agtggttcaa aatgaataaa
660
gagattccaa atggaaatac atcagagctt atttttaatg cagtgcattg aaaagatgca
720
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<210> 1580

<211> 824

<212> PRT

<213> Homo sapiens

<400> 1580

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Pro	Thr	Gly	Pro	Leu	Leu	Ala	Pro	Pro	Ala	Gly	Ala	Thr	Leu	Asn	Arg
			20					25					30		
Leu	Arg	Glu	Pro	Leu	Leu	Arg	Arg	Leu	Ser	Glu	Leu	Leu	Asp	Gln	Ala
			35				40					45			
Pro	Glu	Gly	Arg	Gly	Trp	Arg	Arg	Leu	Ala	Glu	Leu	Ala	Gly	Ser	Arg
			50			55					60				
Gly	Arg	Leu	Arg	Leu	Ser	Cys	Leu	Asp	Leu	Glu	Gln	Cys	Ser	Leu	Lys
65					70					75				80	
Val	Leu	Glu	Pro	Glu	Gly	Ser	Pro	Ser	Leu	Cys	Leu	Leu	Lys	Leu	Met
			85						90					95	
Gly	Glu	Lys	Gly	Cys	Thr	Val	Thr	Glu	Leu	Ser	Asp	Phe	Leu	Gln	Ala
			100					105					110		
Met	Glu	His	Thr	Glu	Val	Leu	Gln	Leu	Leu	Ser	Pro	Pro	Gly	Ile	Lys
			115				120					125			
Ile	Thr	Val	Asn	Pro	Glu	Ser	Lys	Ala	Val	Leu	Ala	Gly	Gln	Phe	Val
			130				135					140			
Lys	Leu	Cys	Cys	Arg	Ala	Thr	Gly	His	Pro	Phe	Val	Gln	Tyr	Gln	Trp
145					150					155				160	
Phe	Lys	Met	Asn	Lys	Glu	Ile	Pro	Asn	Gly	Asn	Thr	Ser	Glu	Leu	Ile

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165      170      175
Phe Asn Ala Val His Val Lys Asp Ala Gly Phe Tyr Val Cys Arg Val
180      185      190
Asn Asn Asn Phe Thr Phe Glu Phe Ser Gln Trp Ser Gln Leu Asp Val
195      200      205
Cys Asp Ile Pro Glu Ser Phe Gln Arg Ser Val Asp Gly Val Ser Glu
210      215      220
Ser Lys Leu Gln Ile Cys Val Glu Pro Thr Ser Gln Lys Leu Met Pro
225      230      235
Gly Ser Thr Leu Val Leu Gln Cys Val Ala Val Gly Ser Pro Ile Pro
245      250      255
His Tyr Gln Trp Phe Lys Asn Glu Leu Pro Leu Thr His Glu Thr Lys
260      265      270
Lys Leu Tyr Met Val Pro Tyr Ala Asp Leu Glu His Gln Gly Thr Tyr
275      280      285
Trp Cys His Val Tyr Asn Asp Arg Asp Ser Gln Asp Ser Lys Lys Val
290      295      300
Glu Ile Ile Ile Gly Arg Thr Asp Glu Ala Val Glu Cys Thr Glu Asp
305      310      315
Glu Leu Asn Asn Leu Gly His Pro Asp Asn Lys Glu Gln Thr Thr Asp
325      330      335
Gln Pro Leu Ala Lys Asp Lys Val Ala Leu Leu Ile Gly Asn Met Asn
340      345      350
Tyr Arg Glu His Pro Lys Leu Lys Ala Pro Leu Val Asp Val Tyr Glu
355      360      365
Leu Thr Asn Leu Leu Arg Gln Leu Asp Phe Lys Val Val Ser Leu Leu
370      375      380
Asp Leu Thr Glu Tyr Glu Met Arg Asn Ala Val Asp Glu Phe Leu Leu
385      390      395
Leu Leu Asp Lys Gly Val Tyr Gly Leu Leu Tyr Tyr Ala Gly His Gly
405      410      415
Tyr Glu Asn Phe Gly Asn Ser Phe Met Val Pro Val Asp Ala Pro Asn
420      425      430
Pro Tyr Arg Ser Glu Asn Cys Leu Cys Val Gln Asn Ile Leu Lys Leu
435      440      445
Met Gln Glu Lys Glu Thr Gly Leu Asn Val Phe Leu Leu Asp Met Cys
450      455      460
Arg Lys Arg Asn Asp Tyr Asp Asp Thr Ile Pro Ile Leu Asp Ala Leu
465      470      475
Lys Val Thr Ala Asn Ile Val Phe Gly Tyr Ala Thr Cys Gln Gly Ala
485      490      495
Glu Ala Phe Glu Ile Gln His Ser Gly Leu Ala Asn Gly Ile Phe Met
500      505      510
Lys Phe Leu Lys Asp Arg Leu Leu Glu Asp Lys Lys Ile Thr Val Leu
515      520      525
Leu Asp Glu Val Ala Glu Asp Met Gly Lys Cys His Leu Thr Lys Gly
530      535      540
Lys Gln Ala Leu Glu Ile Arg Ser Ser Leu Ser Glu Lys Arg Ala Leu
545      550      555
Thr Asp Pro Ile Gln Gly Thr Glu Tyr Ser Ala Glu Ser Leu Val Arg
565      570      575
Asn Leu Gln Trp Ala Lys Ala His Glu Leu Pro Glu Ser Met Cys Leu
580      585      590
Lys Phe Asp Cys Gly Val Gln Ile Gln Leu Gly Phe Ala Ala Glu Phe

```

595 600 605
 Ser Asn Val Met Ile Ile Tyr Thr Ser Ile Val Tyr Lys Pro Pro Glu
 610 615 620
 Ile Ile Met Cys Asp Ala Tyr Val Thr Asp Phe Pro Leu Asp Leu Asp
 625 630 635 640
 Ile Asp Pro Lys Asp Ala Asn Lys Gly Thr Pro Glu Glu Thr Gly Ser
 645 650 655
 Tyr Leu Val Ser Lys Asp Leu Pro Lys His Cys Leu Tyr Thr Arg Leu
 660 665 670
 Ser Ser Leu Gln Lys Leu Lys Glu His Leu Val Phe Thr Val Cys Leu
 675 680 685
 Ser Tyr Gln Tyr Ser Gly Leu Glu Asp Thr Val Glu Asp Lys Gln Glu
 690 695 700
 Val Asn Val Gly Lys Pro Leu Ile Ala Lys Leu Asp Met His Arg Gly
 705 710 715 720
 Leu Gly Arg Lys Thr Cys Phe Gln Thr Cys Leu Met Ser Asn Gly Pro
 725 730 735
 Tyr Gln Ser Ser Ala Ala Thr Ser Gly Gly Ala Gly His Tyr His Ser
 740 745 750
 Leu Gln Asp Pro Phe His Gly Val Tyr His Ser His Pro Gly Asn Pro
 755 760 765
 Ser Asn Val Thr Pro Ala Asp Ser Cys His Cys Ser Arg Thr Pro Asp
 770 775 780
 Ala Phe Ile Ser Ser Phe Ala His His Ala Ser Cys His Phe Ser Arg
 785 790 795 800
 Ser Asn Val Pro Val Glu Thr Thr Asp Glu Ile Pro Phe Ser Phe Ser
 805 810 815
 Asp Arg Leu Arg Ile Ser Glu Lys
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<210> 1581
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 1581
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 ggataccgc atgtgcccgg ttcgaaggag aagttcgagt ccactaccc gggtagcttc
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 atctgtgagg ccatcgacca gaccgcggg tggttttaca ccatgatggc cgtcggaacc
 240
 ctggtgtttg acgagtcctc gtaccgcaat gtgctgtgtc tgggccacat cttggccgag
 300
 gacggtcgca agatgagcaa gcacctggc aacatcctgt tgcctatccc gtcgatggat
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 420
 cgacgc
 426

<210> 1582

<211> 142
 <212> PRT
 <213> Homo sapiens

<400> 1582
 Asp Pro His Arg Pro Phe Ile Asp Glu Val Thr Phe Thr Arg Glu Gly
 1 5 10 15
 His Thr Tyr His Arg Val Pro Glu Val Ala Asp Ala Trp Leu Asp Ser
 20 25 30
 Gly Ser Met Pro Phe Ala Gln Trp Gly Tyr Pro His Val Pro Gly Ser
 35 40 45
 Lys Glu Lys Phe Glu Ser His Tyr Pro Gly Asp Phe Ile Cys Glu Ala
 50 55 60
 Ile Asp Gln Thr Arg Gly Trp Phe Tyr Thr Met Met Ala Val Gly Thr
 65 70 75 80
 Leu Val Phe Asp Glu Ser Ser Tyr Arg Asn Val Leu Cys Leu Gly His
 85 90 95
 Ile Leu Ala Glu Asp Gly Arg Lys Met Ser Lys His Leu Gly Asn Ile
 100 105 110
 Leu Leu Pro Ile Pro Leu Met Asp Ser His Gly Ala Asp Ala Leu Arg
 115 120 125
 Trp Phe Met Ala Ala Asp Gly Ser Pro Trp Ser Ala Arg Arg
 130 135 140

<210> 1583
 <211> 450
 <212> DNA
 <213> Homo sapiens

<400> 1583
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 ggggggttctg aggaaatggg gtcaatggat gaggcaggtt ataggaagga tttgggggct
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 cctaagggaa taggttcagg gagtaaggca ggtttcaggg atggtttagg gagttctggg
 180
 gaaatggggt caatggatga ggcagattat aggaaggatt tgggagctcc tgaggaaatg
 240
 gggttcaggca gttacacaga ttacaggaat gggttaggca gttctggaaa aatcagttca
 300
 ggggatgagg caggttataa gaatgtttta ggggggttctg ggaggaatcc attagggagc
 360
 gaggcaggtt ctaggggtag tttggaggat tctgggtaca tcttgatcatg gaatgaggca
 420
 gggttctaggc aaggctttgg gggaactagt
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<210> 1584
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 1584
 Xaa Arg Val Lys Gly Tyr Gly Asp Gly Ser Gly Ser Lys Glu Gly Phe


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      1           5           10           15
Arg Asp Gly Leu Gly Gly Ser Glu Glu Met Gly Ser Met Asp Glu Ala
      20           25           30
Gly Tyr Arg Lys Asp Leu Gly Ala Pro Lys Gly Ile Gly Ser Gly Ser
      35           40           45
Lys Ala Gly Phe Arg Asp Gly Leu Gly Ser Ser Gly Glu Met Gly Ser
      50           55           60
Met Asp Glu Ala Asp Tyr Arg Lys Asp Leu Gly Ala Pro Glu Glu Met
      65           70           75           80
Gly Ser Gly Ser Tyr Thr Asp Tyr Arg Asn Gly Leu Gly Ser Ser Gly
      85           90           95
Lys Ile Ser Ser Gly Asp Glu Ala Gly Tyr Lys Asn Val Leu Gly Gly
      100          105          110
Ser Gly Arg Asn Pro Leu Gly Ser Glu Ala Gly Ser Arg Gly Ser Leu
      115          120          125
Glu Asp Ser Gly Tyr Ile Leu Ser Trp Asn Glu Ala Gly Ser Arg Gln
      130          135          140
Gly Phe Gly Gly Thr Ser
      145          150

```

<210> 1585

<211> 596

<212> DNA

<213> Homo sapiens

<400> 1585

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120
ggcagctgca gggcaagctg gggaggaagc gcagggtgtt gcacaggttg catcataatg
180
gaaggaaaga gcggcaggtc cagagaaacc ggcctctccc aaaaagttat caaacactgg
240
tttagaaaata cgcttttttaa ggaacgacag agaaataaaag attcaccata caacttcagt
300
aaccctccta taacggtttt agaagatatt agaattgatt cacagcccac ctcttttagaa
360
cattacaaat ctgatgcatt attcagtaaa aggtcttcta gaacgagatt tactgactac
420
cagcttaggg ttctgcaaga cttttttgac acaaacgctt acccaaaaaga tgatgaaata
480
gaacaactct ccaactgttct caatctgcct acccgggtta ttgttgatg gttccagaat
540
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596

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<210> 1586

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1586

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Met Glu Gly Lys Ser Gly Arg Ser Arg Glu Thr Gly Leu Ser Gln Lys

```

```

      1           5           10           15
Val Ile Lys His Trp Phe Arg Asn Thr Leu Phe Lys Glu Arg Gln Arg
      20           25           30
Asn Lys Asp Ser Pro Tyr Asn Phe Ser Asn Pro Pro Ile Thr Val Leu
      35           40           45
Glu Asp Ile Arg Ile Asp Pro Gln Pro Thr Ser Leu Glu His Tyr Lys
      50           55           60
Ser Asp Ala Ser Phe Ser Lys Arg Ser Ser Arg Thr Arg Phe Thr Asp
      65           70           75           80
Tyr Gln Leu Arg Val Leu Gln Asp Phe Phe Asp Thr Asn Ala Tyr Pro
      85           90           95
Lys Asp Asp Glu Ile Glu Gln Leu Ser Thr Val Leu Asn Leu Pro Thr
      100          105          110
Arg Val Ile Val Val Trp Phe Gln Asn Ala Arg Gln Lys Ala Arg Lys
      115          120          125
Ser Tyr Glu Asn Gln Ala Glu Thr Pro Ser Arg
      130          135

```

<210> 1587
 <211> 501
 <212> DNA
 <213> Homo sapiens

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<400> 1587
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120
tccacggagg gctcagcgtg gagaggatat gccgtggcat tctccctggg agaccacaca
180
tgttcccgac agctcagacc ccagaccgca tgtgctcctg acagctcaga cccagaccg
240
cgcgtgctcc tgacagctca gaccccagac cgcaggtgct cccgacagct cagaccccag
300
accgcggtg ctctgacag ctcagacccc agaccgcgcg tgctcccgac agctcagacc
360
ccagaccgcg ggtgctcctg acagctcaga cccagaccg cgcgtgctcc cgacagctca
420
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480
ctcagacccc agaccacgcg t
501

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<210> 1588
 <211> 86
 <212> PRT
 <213> Homo sapiens

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<400> 1588
Ser Thr Glu Gly Ser Ala Trp Arg Gly Tyr Ala Val Ala Phe Ser Leu
      1           5           10           15
Gly Asp His Thr Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Cys Ala
      20           25           30
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Leu Thr Ala Gln Thr

```

```

          35          40          45
Pro Asp Arg Arg Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Gly Ala
   50          55          60
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Pro Thr Ala Gln Thr
   65          70          75          80
Pro Asp Arg Gly Cys Ser
          85

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<210> 1589
 <211> 407
 <212> DNA
 <213> Homo sapiens

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<400> 1589
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tccaccgggt ccactaacgc cgacatggct gctttcgtgc gagcaggggg aacgtctttc
120
tgctactcgt ttgctgacca ccaagagggc gggcgtggac gggttcacgcg cagttggcag
180
gatgtccccc gtacgagttt ggcgatctca gcgttggtgc ccaatgatcg tccgtcgcag
240
gactggggct ggctgtcgat gggtgcgggg ctcgctggtt tcaaggatcat caaggaggtc
300
gggtggggctg accgttcccg agtgacgctg aagtggccca atgatgtgct cgtggatctg
360
gacactgacc agggcggcaa agtgtgcgga attctctcag aacgcgt
407

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<210> 1590
 <211> 135
 <212> PRT
 <213> Homo sapiens

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<400> 1590
Lys Leu Ala Gly Asp Thr Leu Phe Thr Gly Pro Arg Gly Gly Gly Val
 1          5          10          15
Thr Cys Ile Asp Ser Thr Gly Ser Thr Asn Ala Asp Met Ala Ala Phe
          20          25          30
Val Arg Ala Gly Gly Thr Ser Phe Cys Leu Leu Val Ala Asp His Gln
          35          40          45
Glu Gly Gly Arg Gly Arg Phe Thr Arg Ser Trp Gln Asp Val Pro Gly
          50          55          60
Thr Ser Leu Ala Ile Ser Ala Leu Val Pro Asn Asp Arg Pro Ser Gln
          65          70          75          80
Asp Trp Gly Trp Leu Ser Met Val Ala Gly Leu Ala Val Val Lys Val
          85          90          95
Ile Lys Glu Val Gly Gly Ala Asp Arg Ser Arg Val Thr Leu Lys Trp
          100          105          110
Pro Asn Asp Val Leu Val Asp Leu Asp Thr Asp Gln Gly Gly Lys Val
          115          120          125
Cys Gly Ile Leu Ser Glu Arg
          130          135

```

<210> 1591
 <211> 424
 <212> DNA
 <213> Homo sapiens

<400> 1591
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 120
 cgcattcttga aaaagccccc agatgcctcc ctatggagga cctcaccac ccacatcacc
 180
 agtagggagc ttgggactta ccctaaccac aggggggtga ctgttgctgt ccctgcacag
 240
 aacgtccagc gagtcctgac tttccagccg ctgcgcttca tccaggagca cgtcctgac
 300
 cctgtctttg acctcagcgg ccccgagcgt ctggcccagc ctgtccagta ctcccttgac
 360
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 420
 attt
 424

<210> 1592
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1592
 Met Gly Ile Trp Asp Arg Arg Ile Leu Lys Lys Pro Pro Asp Ala Ser
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 Leu Trp Arg Thr Ser Pro Thr His Ile Thr Ser Arg Glu Leu Gly Thr
 20 25 30
 Tyr Pro Asn His Arg Gly Val Thr Val Val Val Pro Ala Gln Asn Val
 35 40 45
 Gln Arg Val Leu Thr Phe Gln Pro Leu Arg Phe Ile Gln Glu His Val
 50 55 60
 Leu Ile Pro Val Phe Asp Leu Ser Gly Pro Ser Ser Leu Ala Gln Pro
 65 70 75 80
 Val Gln Tyr Ser Leu Asp Cys Gly Ile Pro Gly Cys Ser Arg Pro
 85 90 95

<210> 1593
 <211> 1678
 <212> DNA
 <213> Homo sapiens

<400> 1593
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 120
 tcccgtaaaa aagaagccaa agctgaggaa cttcaggagg ccaaggagaa gttagccagc
 180

ctagagagag aagcatcagt aaagagaaat cagacccgtg aatttgatgg tactgaagtt
240
ttaaagggag atgagttcaa acgatatgtc aataaacttc gaagcaagag tacagttttc
300
aaaaagaagc atcacataat agctgaactt aaagctgaat tcggtctttt gcagaggact
360
gaagaacttc ttaagcaacg tcatgaaaat attcaacaac aactgcaaac tatggaggag
420
aaaaagggta tatctggata tagttacacc caagaagagc tagaaagagt atctgcactg
480
aagagtgaag ttgatgaaat gaaaggacga acattggatg atatgtctga aatggtgaaa
540
aaactgtatt cattggtatc tgaaaagaag tcagctcttg cctcagttat aaaagagcta
600
cgacagttgc gtcaaaaata tcaagaactg acccaggagt gtgatgaaaa gaaatcccag
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720
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780
aagaacctag aagttcaact tcgtcgtgct actgatgaga tgaaggcata tatctcttct
840
gatcaacaag aaaaaagaaa ggcaattagg gaacagtata ccaaaaatac tgctgaacaa
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960
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1260
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1320
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1560
tgtaaaatgc aagaaaattt aatattttga ctaacatgtc ttttctgttt gtatcattta
1620
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1678

<210> 1594

<211> 365

<212> PRT

<213> Homo sapiens

<400> 1594

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Leu Glu Ser Lys Ile Asn Glu Ile Asn Thr Glu Ile Asn Gln Leu Ile
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Glu Lys Lys Met Met Arg Asn Glu Pro Ile Glu Gly Lys Leu Ser Leu
 20           25           30
Tyr Arg Gln Gln Ala Ser Ile Ile Ser Arg Lys Lys Glu Ala Lys Ala
 35           40           45
Glu Glu Leu Gln Glu Ala Lys Glu Lys Leu Ala Ser Leu Glu Arg Glu
 50           55           60
Ala Ser Val Lys Arg Asn Gln Thr Arg Glu Phe Asp Gly Thr Glu Val
 65           70           75           80
Leu Lys Gly Asp Glu Phe Lys Arg Tyr Val Asn Lys Leu Arg Ser Lys
 85           90           95
Ser Thr Val Phe Lys Lys Lys His His Ile Ile Ala Glu Leu Lys Ala
 100          105          110
Glu Phe Gly Leu Leu Gln Arg Thr Glu Glu Leu Lys Gln Arg His
 115          120          125
Glu Asn Ile Gln Gln Gln Leu Gln Thr Met Glu Glu Lys Lys Gly Ile
 130          135          140
Ser Gly Tyr Ser Tyr Thr Gln Glu Glu Leu Glu Arg Val Ser Ala Leu
 145          150          155          160
Lys Ser Glu Val Asp Glu Met Lys Gly Arg Thr Leu Asp Asp Met Ser
 165          170          175
Glu Met Val Lys Lys Leu Tyr Ser Leu Val Ser Glu Lys Lys Ser Ala
 180          185          190
Leu Ala Ser Val Ile Lys Glu Leu Arg Gln Leu Arg Gln Lys Tyr Gln
 195          200          205
Glu Leu Thr Gln Glu Cys Asp Glu Lys Lys Ser Gln Tyr Asp Ser Cys
 210          215          220
Ala Ala Gly Leu Glu Ser Asn Arg Ser Lys Leu Glu Gln Glu Val Arg
 225          230          235          240
Arg Leu Arg Glu Glu Cys Leu Gln Glu Glu Ser Arg Tyr His Tyr Thr
 245          250          255
Asn Cys Met Ile Lys Asn Leu Glu Val Gln Leu Arg Arg Ala Thr Asp
 260          265          270
Glu Met Lys Ala Tyr Ile Ser Ser Asp Gln Gln Glu Lys Arg Lys Ala
 275          280          285
Ile Arg Glu Gln Tyr Thr Lys Asn Thr Ala Glu Gln Glu Asn Leu Gly
 290          295          300
Lys Lys Leu Arg Glu Lys Gln Lys Val Ile Arg Glu Ser His Gly Pro
 305          310          315          320
Asn Met Lys Gln Ala Lys Met Trp Arg Asp Leu Glu Gln Leu Met Glu
 325          330          335
Cys Lys Lys Gln Cys Phe Leu Lys Gln Gln Ser Gln Thr Ser Ile Gly
 340          345          350
Gln Val Ile Gln Glu Gly Gly Glu Asp Arg Leu Ile Leu
 355          360          365

```

<210> 1595

<211> 559

<212> DNA

<213> Homo sapiens

<400> 1595
 accggtccc ctcacaggcc cacacctgct tctcctcctg gggcagggca gcctgggtggg
 60
 gcatggcccg ggagccgcc acttggcgag gaacaggctc catagcgacc tcagaacact
 120
 ggtgctgggg cccagccagg gagagcatct tcccgtggg accttccccg gggcgggtca
 180
 tcccttgag atgtagggtg cagctgagat ggtggcggcc ccattcctgc tgttcgccag
 240
 cctgggctgg ggttactagg atcacccctg ggctgatgag gagccccggg cttgggcagt
 300
 taccaagtgg ggggtcacag tctggaaagt ggtggaacca agggagcggc ctcgcccagg
 360
 ccacactctc aaatactggc cctcgacaaa aggcagctgg gctctcaaga cagggccacc
 420
 tctctctgc tgggcccgcg cccgtggaga gcaagtggga actgacccta tcttctgtcc
 480
 cagcttgag agccagcatc aaggtcaggc ctacttgcc caagaaagag gagtgaggag
 540
 gccactgga ggaacgcgt
 559

<210> 1596
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 1596
 Met Leu Ala Leu Gln Ala Gly Thr Glu Asp Arg Val Ser Ser His Leu
 1 5 10 15
 Leu Ser Thr Gly Ala Gly Pro Ala Glu Arg Arg Trp Pro Cys Leu Glu
 20 25 30
 Ser Pro Ala Ala Phe Cys Arg Gly Pro Val Phe Glu Ser Val Ala Trp
 35 40 45
 Ala Arg Pro Leu Pro Trp Phe His His Phe Pro Asp Cys Asp Pro Pro
 50 55 60
 Leu Gly Asn Cys Pro Arg Pro Gly Leu Leu Ile Ser Pro Arg Val Ile
 65 70 75 80
 Leu Val Pro Pro Ala Gln Ala Gly Glu Gln Gln Glu Trp Gly Arg His
 85 90 95
 His Leu Ser Cys Thr Leu His Leu Gln Gly Met Ser Arg Pro Gly Glu
 100 105 110
 Gly Pro Ser Gly Lys Met Leu Ser Leu Ala Gly Pro Gln His Gln Cys
 115 120 125
 Ser Glu Val Ala Met Glu Pro Val Pro Arg Gln Val Gly Gly Ser Pro
 130 135 140
 Ala Met Pro His Gln Ala Ala Leu Pro Gln Glu Glu Lys Gln Val Trp
 145 150 155 160
 Ala Cys Glu Arg Asp Arg
 165

<210> 1597
 <211> 609

<212> DNA

<213> Homo sapiens

<400> 1597

tcgtcaacgg aaacttcggc cttcgggcct acccataatc cttgggacct tgaacgggta
 60
 ccgggtgggtt ccggtggtgg ttcagcagct agcttggtt cctttcaggc cccgttggtt
 120
 ttgggcactg ataccggggg ctcgatccgc caacctggag cggtgaccgg caccgtcggg
 180
 atcaagccga cctacgggtc gacctccga tacggcggtta tcgctatggc ttcattcttg
 240
 gataactctg ggccctgcgc ccgtaccgtc cttgacgccg cgttgctcca tcaggccatt
 300
 gccggtcacg acgctatgga ccagaccacg attaatcagc ccaccccggc ggtcgttgag
 360
 gctgcgcggc aggcagacgt ttccgggggtg cgcattggcg ttgtcacgga gttgagcggg
 420
 cagggttacg accctcaggt cgaggcccg ttccacgagg ctgtcgagat gctaatagag
 480
 gcgggggctg aggtcgttga ggtctcttgc ccgaactttg acctcgcctt acctgcttat
 540
 taccttattc agcctgccga ggtgtctagc aacctggctc gttacgacgc catgcgttac
 600
 ggcttacgc
 609

<210> 1598

<211> 203

<212> PRT

<213> Homo sapiens

<400> 1598

Ser	Ser	Thr	Glu	Thr	Ser	Ala	Phe	Gly	Pro	Thr	His	Asn	Pro	Trp	Asp
1				5					10					15	
Leu	Glu	Arg	Val	Pro	Gly	Gly	Ser	Gly	Gly	Gly	Ser	Ala	Ala	Ser	Leu
			20					25					30		
Ala	Ser	Phe	Gln	Ala	Pro	Leu	Ala	Leu	Gly	Thr	Asp	Thr	Gly	Gly	Ser
		35				40					45				
Ile	Arg	Gln	Pro	Gly	Ala	Val	Thr	Gly	Thr	Val	Gly	Ile	Lys	Pro	Thr
	50				55					60					
Tyr	Gly	Ser	Thr	Ser	Arg	Tyr	Gly	Val	Ile	Ala	Met	Ala	Ser	Ser	Leu
65				70					75				80		
Asp	Thr	Pro	Gly	Pro	Cys	Ala	Arg	Thr	Val	Leu	Asp	Ala	Ala	Leu	Leu
			85					90					95		
His	Gln	Ala	Ile	Ala	Gly	His	Asp	Ala	Met	Asp	Gln	Thr	Thr	Ile	Asn
		100						105					110		
Gln	Pro	Thr	Pro	Ala	Val	Val	Glu	Ala	Ala	Arg	Gln	Ala	Asp	Val	Ser
	115						120					125			
Gly	Val	Arg	Ile	Gly	Val	Val	Thr	Glu	Leu	Ser	Gly	Gln	Gly	Tyr	Asp
	130				135					140					
Pro	Gln	Val	Glu	Ala	Arg	Phe	His	Glu	Ala	Val	Glu	Met	Leu	Ile	Glu
145				150					155					160	
Ala	Gly	Ala	Glu	Val	Val	Glu	Val	Ser	Cys	Pro	Asn	Phe	Asp	Leu	Ala


```

                165                170                175
Leu Pro Ala Tyr Tyr Leu Ile Gln Pro Ala Glu Val Ser Ser Asn Leu
                180                185                190
Ala Arg Tyr Asp Ala Met Arg Tyr Gly Leu Arg
                195                200

```

<210> 1599
 <211> 526
 <212> DNA
 <213> Homo sapiens

```

<400> 1599
gcgtggccga cggctgctgt gtggtcagcg atctttatatt ttcttgatcg attcagaacc
60
cggcacctgc acgtgtggtt tctctgcttt tgttggggag cgtgcgtcgc gacctggatt
120
agcatgcacg tgaacacgtg gatggccggg atgctctcgg tgacaggtgg gggtgatcca
180
gcatcgggag cgggtccggc agtgatttcg gctccctttg ttgaggaatc atgcaaggcg
240
cttggtcttt tcgcgtggc catcggcatg gggcgacgga tgacctcggg agttcagacg
300
gtgagcatgg cggggtcttc ggcaattggt ttgcctttg ttgagaacat tatgtactac
360
gcccgtgcag ataactacgc ccgtgtgacg gcttcgggtg gggaccccaa acaaggcgtt
420
gatgaagttg gtgctgttgc ggggagtgtg tgcctcgttt gggcatccgc tgttcaccag
480
catgacgggt atcgggtctgg cccttgggct gaggtcacga agttga
526

```

<210> 1600
 <211> 134
 <212> PRT
 <213> Homo sapiens

```

<400> 1600
Met His Val Asn Thr Trp Met Ala Gly Met Leu Ser Val Thr Gly Gly
1          5          10          15
Val Asp Pro Ala Ser Gly Ala Gly Pro Ala Val Tyr Ser Ala Pro Phe
20        25        30
Val Glu Glu Ser Cys Lys Ala Leu Val Leu Phe Ala Leu Ala Ile Gly
35        40        45
Met Gly Arg Arg Met Thr Ser Val Val Gln Thr Val Ser Met Ala Gly
50        55        60
Leu Ser Ala Ile Gly Phe Ala Phe Val Glu Asn Ile Met Tyr Tyr Ala
65        70        75        80
Arg Ala Asp Asn Tyr Ala Arg Val Thr Ala Ser Gly Gly Asp Pro Lys
85        90        95
Gln Gly Val Asp Glu Val Gly Ala Val Ala Gly Ser Val Cys Leu Val
100       105       110
Trp Ala Ser Ala Val His Gln His Asp Gly Tyr Arg Ser Gly Pro Trp
115       120       125
Ala Glu Val Thr Lys Leu

```

130

<210> 1601

<211> 447

<212> DNA

<213> Homo sapiens

<400> 1601

gcccggccgcc ccgtttccgc agattctgga ggagtgccga tggccgagtt catctacacc
 60
 atgcacaacg tccgaaaggc ggtgggtgac aaagttatcc ttgacaatgt cacgctgtcg
 120
 ttcttccccg gcgccaagat tgggtgtgtc ggaccgaatg gcgctggcaa atcgacgatg
 180
 ctcaagctca tggctgggtct cgataagccc aataacggcg atgccaactt ggctaaaggc
 240
 gccaccgtcg gaattctgct tcaggagccc ccgctcaccg aggacaaaac tgttcgcgag
 300
 aacgtcgaag aggccgtcgg cgacatcaaa gccaaagctgg cacggttcga ggaagtctcc
 360
 gccgagatgg ccaaccctga cgccgacttt gacgccctga tggcggagat gggtgagctg
 420
 cagaccgagc tcgataacgc caacgcg
 447

<210> 1602

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1602

Met	Ala	Glu	Phe	Ile	Tyr	Thr	Met	His	Asn	Val	Arg	Lys	Ala	Val	Gly
1				5					10					15	
Asp	Lys	Val	Ile	Leu	Asp	Asn	Val	Thr	Leu	Ser	Phe	Phe	Pro	Gly	Ala
			20					25					30		
Lys	Ile	Gly	Val	Val	Gly	Pro	Asn	Gly	Ala	Gly	Lys	Ser	Thr	Met	Leu
	35						40					45			
Lys	Leu	Met	Ala	Gly	Leu	Asp	Lys	Pro	Asn	Asn	Gly	Asp	Ala	Asn	Leu
	50					55					60				
Ala	Lys	Gly	Ala	Thr	Val	Gly	Ile	Leu	Leu	Gln	Glu	Pro	Pro	Leu	Thr
65					70					75				80	
Glu	Asp	Lys	Thr	Val	Arg	Glu	Asn	Val	Glu	Glu	Ala	Val	Gly	Asp	Ile
			85						90				95		
Lys	Ala	Lys	Leu	Ala	Arg	Phe	Glu	Glu	Val	Ser	Ala	Glu	Met	Ala	Asn
		100					105					110			
Pro	Asp	Ala	Asp	Phe	Asp	Ala	Leu	Met	Ala	Glu	Met	Gly	Glu	Leu	Gln
		115					120					125			
Thr	Glu	Leu	Asp	Asn	Ala	Asn	Ala								
		130					135								

<210> 1603

<211> 540

<212> DNA

<213> Homo sapiens

<400> 1603
 acgcgtaagc tcaccgaagc catgatggca atgctgctgg aactgcatta cagcaagcag
 60
 gaaatccttg aggcgtacct caacgaggtc ttcgtcggtc aggatggcca gcgcgccgtg
 120
 cacgggtttg gcttgccagc tcagttcttc tttggccagc ctttgtccga gctgaagttg
 180
 catcaagtcg cggtgttggt cgggatggtc aagggcccggt cctattacaa cccgcggcgc
 240
 aatccggaac gtgcgctcga gcgtcgtaac ctggtgctgg atgtgctgga acagcagggt
 300
 gtagccactg ccgaacaagt cgctgccgca aagaaaatgc cgctgggtgt aaccactcgc
 360
 ggcaagctgg cggacagctc cttcccaggc tttatcgacc tgggtcaaacg ccagttgcgt
 420
 gaagattacc gcgacgaaga cttgaccgaa gaaggcctgc ggattttcac cagtttcgac
 480
 ccgattctgc agatgaaagc cgaagcatcg gtgaacgaca cattcaagcg cctgaccggc
 540

<210> 1604
 <211> 180
 <212> PRT
 <213> Homo sapiens

<400> 1604
 Thr Arg Lys Leu Thr Glu Ala Met Met Ala Met Leu Leu Glu Leu His
 1 5 10 15
 Tyr Ser Lys Gln Glu Ile Leu Glu Ala Tyr Leu Asn Glu Val Phe Val
 20 25 30
 Gly Gln Asp Gly Gln Arg Ala Val His Gly Phe Gly Leu Ala Ser Gln
 35 40 45
 Phe Phe Phe Gly Gln Pro Leu Ser Glu Leu Lys Leu His Gln Val Ala
 50 55 60
 Leu Leu Val Gly Met Val Lys Gly Pro Ser Tyr Tyr Asn Pro Arg Arg
 65 70 75 80
 Asn Pro Glu Arg Ala Leu Glu Arg Arg Asn Leu Val Leu Asp Val Leu
 85 90 95
 Glu Gln Gln Gly Val Ala Thr Ala Glu Gln Val Ala Ala Ala Lys Lys
 100 105 110
 Met Pro Leu Gly Val Thr Thr Arg Gly Lys Leu Ala Asp Ser Ser Phe
 115 120 125
 Pro Gly Phe Ile Asp Leu Val Lys Arg Gln Leu Arg Glu Asp Tyr Arg
 130 135 140
 Asp Glu Asp Leu Thr Glu Glu Gly Leu Arg Ile Phe Thr Ser Phe Asp
 145 150 155 160
 Pro Ile Leu Gln Met Lys Ala Glu Ala Ser Val Asn Asp Thr Phe Lys
 165 170 175
 Arg Leu Thr Gly
 180

<210> 1605
 <211> 427

<212> DNA

<213> Homo sapiens

<400> 1605

acgcgttggt gcggtcggtc gcacgcagtc cgtccaagag gtacaggcca gcgttgccgc
 60
 cattctttgc gggcgggata tgcactggga tattgcggcc catcgccctgt gaccacacat
 120
 cgcagcgctg gacccaccag cccacctggc cccactcgca cgtgccagta ctgtccgcac
 180
 gcaagaaatc gcggtgagct gcgtgagcct gctgggtgcc gcctgccact acggcaagac
 240
 ccagcgctac ggcgactgcc atgatgaccg aaaggacgcg acccctaata gatgcagtca
 300
 tctttctcct tcacaaagta ttggttaatt gtcacttagc tttatcgctc ggaatctgtg
 360
 aaccggttaac atcccgacgc ggaagctaac tagcaagcag tctaatgcac tcccgggcca
 420
 aatgttg
 427

<210> 1606

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1606

Met Thr Ala Ser Ile Arg Gly Arg Val Leu Ser Val Ile Met Ala Val
 1 5 10 15
 Ala Val Ala Leu Gly Leu Ala Val Val Ala Gly Gly Thr Gln Gln Ala
 20 25 30
 His Ala Ala His Arg Asp Phe Leu Arg Ala Asp Ser Thr Gly Thr Cys
 35 40 45
 Glu Trp Asp Gln Val Gly Trp Trp Val Gln Arg Cys Asp Val Trp Ser
 50 55 60
 Gln Ala Met Gly Arg Asn Ile Pro Val Gln Ile Pro Pro Ala Lys Asn
 65 70 75 80
 Gly Gly Asn Ala Gly Leu Tyr Leu Leu Asp Gly Leu Arg Ala Thr Asp
 85 90 95
 Arg Thr Asn Ala
 100

<210> 1607

<211> 396

<212> DNA

<213> Homo sapiens

<400> 1607

gcacggctcc gctcgcggcc gccgtgatgg tacataccgg cgcgaccgtg atcgattctt
 60
 tgccgcaagg caatttactt ccacgtcacg gccgatgcga tgaagatgac gattcgctca
 120
 cggatgggac tgatcccgta cgaggcgatc gtgggcggga cgatgatgat cgtggcgacg
 180

ttgctgtacg gattcatttt gtagcataaa taaggagggg ttcgatgaac aggaaaaccc ,
 240
 tttctgttgg cacccgattc gttcaaggaa agcatgacgg caaaagaagt ctgtatcgcg
 300
 atggaaaaag gactgagccg cgtctacccc gacgcccggg ttatccatgt gccgatggcg
 360
 gacggaggcg aaggcacggg gcagtcgctg gtcgac
 396

<210> 1608
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 1608
 Thr Gly Lys Pro Phe Leu Leu Ala Pro Asp Ser Phe Lys Glu Ser Met
 1 5 10 15
 Thr Ala Lys Glu Val Cys Ile Ala Met Glu Lys Gly Leu Ser Arg Val
 20 25 30
 Tyr Pro Asp Ala Arg Phe Ile His Val Pro Met Ala Asp Gly Gly Glu
 35 40 45
 Gly Thr Val Gln Ser Leu Val Asp
 50 55

<210> 1609
 <211> 505
 <212> DNA
 <213> Homo sapiens

<400> 1609
 acgcgtagat gccacagcgc caggacacac gccaccgcgg agccgaggat gatccacatg
 60
 ggctcgactc acatggacgc catggattcg gcagtggaga gcaggccgcg agcttcgcac
 120
 gcggccccgac tgcgtagtcg cgtcatctca gtgcacatct gttcttcccc gtcgatgagg
 180
 ttcgcggcgt aggacatcgt tacgtccagc atggtggcga tctcagcaat gtcacagccg
 240
 gccttgtgga gggcgaggag ccgagcgcgc gtgcttcctg ctggcacgat gcgttcacgt
 300
 gctgcgttga tgctgctgat actgatatgc aggatgcgcc cggggtcgaa gacggggaat
 360
 ggggtgaatt ggacggtccc ccctggccag cgagtcgttg gacgattcga ctggggacat
 420
 gcgcgagcag ggcgacgaca cgccacggaa cgcgccattc atggacgagg gaacggacat
 480
 ggagcgagaa aaagcgggcg tcgac
 505

<210> 1610
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 1610
 Met Pro Arg Ser Val Ala Cys Arg Arg Pro Ala Arg Ala Cys Pro Gln
 1 5 10 15
 Ser Asn Arg Pro Thr Thr Arg Trp Pro Gly Gly Thr Val Gln Phe Thr
 20 25 30
 Pro Phe Pro Val Phe Asp Pro Gly Arg Ile Leu His Ile Ser Ile Asp
 35 40 45
 Asp Ile Asn Ala Ala Arg Glu Arg Ile Val Pro Ala Gly Ser Thr Arg
 50 55 60
 Ala Arg Leu Leu Ala Leu His Lys Ala Gly Cys Asp Ile Ala Glu Ile
 65 70 75 80
 Ala Thr Met Leu Asp Val Thr Met Ser Tyr Ala Ala Asn Leu Met Ser
 85 90 95
 Gly Glu Glu Gln Met Cys Thr Glu Met Thr Arg Leu Arg Ser Arg Ala
 100 105 110
 Ala Cys Glu Ala Arg Gly Leu Leu Ser Thr Ala Glu Ser Met Ala Ser
 115 120 125
 Met

<210> 1611
 <211> 532
 <212> DNA
 <213> Homo sapiens

<400> 1611
 acgcgtgctg cgtttacagt tgcgtctatt gatttaggtg cgcattccaga atttttagga
 60
 aaaaatgata ttcaattagg caaaaaagaa tctgtagagg atactgcgaa agtattaggt
 120
 agaatgttcg atggatttga attccgtggt ttttcacaac aagctggtga agatttagcg
 180
 aagttctctg gtgtaccggg gtggaatgga ttaacagacg attggcatcc tacacaaatg
 240
 ttagctgatt ttatgacaat aaaagagaat tttggatatc tagaaggaat aaacttaact
 300
 tacgttggag atggacgtaa taatattgcg cattcattaa tggtagcagg tgctatgtta
 360
 ggtgttaatg taagaatttg tacacctaaa tcattaaaac caaaagaggc atatgttgat
 420
 attgcaaaag aaaaagcgag tcaatatggt gggtcagtca tgattacgga taatattgca
 480
 gaagcagttg aaaatacaga tgctatatat acagatgttt gggtatcgac gg
 532

<210> 1612
 <211> 177
 <212> PRT
 <213> Homo sapiens

<400> 1612
 Thr Arg Ala Ala Phe Thr Val Ala Ser Ile Asp Leu Gly Ala His Pro
 1 5 10 15
 Glu Phe Leu Gly Lys Asn Asp Ile Gln Leu Gly Lys Lys Glu Ser Val

```

                20                25                30
Glu Asp Thr Ala Lys Val Leu Gly Arg Met Phe Asp Gly Ile Glu Phe
                35                40                45
Arg Gly Phe Ser Gln Gln Ala Gly Glu Asp Leu Ala Lys Phe Ser Gly
                50                55                60
Val Pro Gly Trp Asn Gly Leu Thr Asp Asp Trp His Pro Thr Gln Met
65                70                75                80
Leu Ala Asp Phe Met Thr Ile Lys Glu Asn Phe Gly Tyr Leu Glu Gly
                85                90                95
Ile Asn Leu Thr Tyr Val Gly Asp Gly Arg Asn Asn Ile Ala His Ser
                100                105                110
Leu Met Val Ala Gly Ala Met Leu Gly Val Asn Val Arg Ile Cys Thr
                115                120                125
Pro Lys Ser Leu Asn Pro Lys Glu Ala Tyr Val Asp Ile Ala Lys Glu
                130                135                140
Lys Ala Ser Gln Tyr Gly Gly Ser Val Met Ile Thr Asp Asn Ile Ala
145                150                155                160
Glu Ala Val Glu Asn Thr Asp Ala Ile Tyr Thr Asp Val Trp Val Ser
                165                170                175
Thr

```

<210> 1613
 <211> 584
 <212> DNA
 <213> Homo sapiens

```

<400> 1613
nnacgcgttc agccgagaaa tatgctgctt ttgcctgcc acctcacaaa tgctacggca
60
cagggcgctc aggttttgcg cctcctggta cgttgctaca cacttgctca cctcccagcg
120
gtatcaatac aacttgcgaa atgcagacaa ggcccaggcc taagacatgg tagacataca
180
tatatacaag gaattcacta tatattgggt gaaaggagat cttcccgttc ctgttcttcc
240
tctgcccgat cctgtgaagc gttcaggag gtcgacatgg ataagtgcg tatgcctggc
300
acggtaaaagt gtcgcgggct tgtagatgcg tgtgaacgtt ttcgtgactt gaagaggtcg
360
aagctgatgt gttcgcgtga gtcgatgca gcgcgctgcg ttgctgcct tgtggtcgat
420
cgtcgccccg atccgataga atgcggagtt gtattttcgt agtactgctc gacaatgcca
480
gtgggcgagg cgatgagttc ctcatttgcg tctttctcga ggtcttggtc catgtccata
540
aacataccaa agctggatgg gtcatacgac ggcgagcat gcat
584

```

<210> 1614
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 1614

```

Xaa Arg Val Gln Pro Arg Asn Met Leu Leu Phe Ala Cys His Leu Thr
 1           5           10           15
Asn Ala Thr Ala Gln Gly Val Gln Val Leu Arg Leu Leu Val Arg Cys
 20           25           30
Tyr Thr Leu Ala His Leu Pro Ala Val Ser Ile Gln Leu Ala Lys Cys
 35           40           45
Arg Gln Gly Pro Gly Leu Arg His Gly Arg His Thr Tyr Ile Gln Gly
 50           55           60
Ile His Tyr Ile Leu Gly Glu Arg Arg Ser Ser Arg Ser Cys Ser Ser
 65           70           75           80
Ser Ala Ala Ser Cys Glu Ala Phe Arg Glu Val Asp Met Asp Asn Val
 85           90           95
Arg Met Pro Gly Thr Val Lys Cys Arg Gly Leu Val Asp Ala Cys Glu
100           105           110
Arg Phe Arg Asp Leu Lys Arg Ser Lys Leu Met Cys Ser Arg Glu Leu
115           120           125
Asp Ala Ala Arg Cys Val Ala Cys Leu Val Val Asp Arg Arg Pro Asp
130           135           140
Pro Ile Glu Cys Gly Val Val Phe Ser
145           150

```

<210> 1615

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1615

```

gccggcttgcc ccgacgcgctc tatgggtgat gttctgtcct ctgtcgtcgg gccgtggggc
60
tcggtgcttg tcagtgtcgg tgtcatcatt tccctgcttg gggctctact ggcctggatc
120
ctactgtgcg gtgagacgat gcaggtgccg ggtgaggacg gcaccatgcc gaaactgttc
180
ggacggatca acaaacatga ggctccagct cccgctttgt ggatcaccaa catcgtctcc
240
cagatatgcc ttgtcatgac ggtgtgtggtg gacggtgctt acttggcgat ggcgaccctg
300
gctgccgccc tcatcctggt gccgtacctg ctgtcagccg cattcgccct gaagatgggtg
360
atc
363

```

<210> 1616

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1616

```

Ala Gly Leu Pro Asp Ala Ser Met Gly Asp Val Leu Ser Ser Val Val
 1           5           10           15
Gly Pro Trp Gly Ser Val Leu Val Ser Ala Gly Val Ile Ile Ser Leu
 20           25           30
Leu Gly Ala Leu Leu Ala Trp Ile Leu Leu Cys Gly Glu Thr Met Gln

```



```

          35          40          45
Val Pro Gly Glu Asp Gly Thr Met Pro Lys Leu Phe Gly Arg Ile Asn
          50          55          60
Lys His Glu Ala Pro Ala Pro Ala Leu Trp Ile Thr Asn Ile Val Ser
65          70          75          80
Gln Ile Cys Leu Val Met Thr Val Leu Trp Asp Gly Ala Tyr Leu Ala
          85          90          95
Met Ala Thr Leu Ala Ala Ala Leu Ile Leu Val Pro Tyr Leu Leu Ser
          100          105          110
Ala Ala Phe Ala Leu Lys Met Val Ile
          115          120

```

<210> 1617
 <211> 447
 <212> DNA
 <213> Homo sapiens

```

<400> 1617
accggtgact acctgtggga gaagaagggc atcgttccca tcctcaagat tgataagggc
60
ctggctgacg agggctgccg cgttcgtctc atgaagccga ttcccggcct cgacgagttg
120
gtgcaccgcg ccgtcgagga gaagcacatc ttcggtacca aggagcgctc tgtcatcctg
180
gatgacgaca aagctggcat cgaaaagatt gtcgaccagc agttcgaact ggccgaacag
240
gtgcgcgctg cgggtcttgt gccgatcctc gaacccgagg tcgacatcca cgctccacat
300
aaggagaagg ctgaggaaag gctgcacaac ctcattccgag agcacatcga ctctctgccg
360
ctcgacgccg agatcatgtt gaagctgacg atcccagagt ccgaagacct gtatgccgac
420
ctcattgcgg atccgaaggc cctacgc
447

```

<210> 1618
 <211> 149
 <212> PRT
 <213> Homo sapiens

```

<400> 1618
Thr Gly Asp Tyr Leu Trp Glu Lys Lys Gly Ile Val Pro Ile Leu Lys
1          5          10          15
Ile Asp Lys Gly Leu Ala Asp Glu Gly Cys His Val Arg Leu Met Lys
          20          25          30
Pro Ile Pro Gly Leu Asp Glu Leu Val His Arg Ala Val Glu Glu Lys
          35          40          45
His Ile Phe Gly Thr Lys Glu Arg Ser Val Ile Leu Asp Asp Asp Lys
          50          55          60
Ala Gly Ile Glu Lys Ile Val Asp Gln Gln Phe Glu Leu Ala Glu Gln
65          70          75          80
Val Arg Ala Ala Gly Leu Val Pro Ile Leu Glu Pro Glu Val Asp Ile
          85          90          95
His Ala Pro His Lys Glu Lys Ala Glu Glu Arg Leu His Asn Leu Ile

```

```

          100          105          110
Arg Glu His Ile Asp Ser Leu Pro Leu Asp Ala Lys Ile Met Leu Lys
          115          120          125
Leu Thr Ile Pro Ser Ser Glu Asp Leu Tyr Ala Asp Leu Ile Ala Asp
          130          135          140
Pro Lys Val Leu Arg
145

```

```

<210> 1619
<211> 355
<212> DNA
<213> Homo sapiens

```

```

<400> 1619
nnggtaccga aaccctgtgc gctaccgcat aaaatcaaag gaactagtat gcataacgta
60
acaacaaatg gtgcctccat tcccgcctt ggcttggca ctttccgtat gcccgcgaa
120
gatgtgcttc gcatcgctcc ttacgcgctc aaggctggtt ttcgccatgt cgataccgcg
180
cagatttatg gcaatgaagt cgaggctcgg gaagcaattg cgacttcgg cgttcagcgt
240
ggcgacatct ttctgaccac aaaagtctgg gtagataatt ataagcatga tgctttcatc
300
gcattctgctg atgaaagcct taccaagctt aagaccgact atgtcgatct gctgc
355

```

```

<210> 1620
<211> 118
<212> PRT
<213> Homo sapiens

```

```

<400> 1620
Xaa Val Pro Lys Pro Val Ser Leu Pro His Lys Ile Lys Gly Thr Ser
  1          5          10          15
Met His Asn Val Thr Thr Asn Gly Ala Ser Ile Pro Ala Leu Gly Leu
          20          25          30
Gly Thr Phe Arg Met Pro Gly Glu Asp Val Leu Arg Ile Val Pro Tyr
          35          40          45
Ala Leu Lys Ala Gly Phe Arg His Val Asp Thr Ala Gln Ile Tyr Gly
          50          55          60
Asn Glu Val Glu Val Gly Glu Ala Ile Ala Thr Ser Gly Val Gln Arg
          65          70          75          80
Gly Asp Ile Phe Leu Thr Thr Lys Val Trp Val Asp Asn Tyr Lys His
          85          90          95
Asp Ala Phe Ile Ala Ser Val Asp Glu Ser Leu Thr Lys Leu Lys Thr
          100          105          110
Asp Tyr Val Asp Leu Leu
          115

```

```

<210> 1621
<211> 386
<212> DNA
<213> Homo sapiens

```

<400> 1621
 gcgcgccatg gaggcgcccc gggtcgcgcc aggatgctcc aggccaagtg aagcgggtccg
 60
 gctgggggtcg gcgggacccg cgggccatgt acggcgacat attcaacgcc acggggcggg
 120
 cccccgaggc ggcggtaggc agcgcgctgg ccccaggagc cacggtcaag gcagaaggcg
 180
 ctttgccgct ggagctggcc actgcgcgcg gtatgaggga cggcgcggcc acaaagcccc
 240
 acctgcccac ctacctgctg ctcttcttcc tgctgctgct ctcgggggcg ctcggcggcc
 300
 tcttcatcgg ttgccagctg cgccattcgg ccttcgccgc gctgcccac gaccgcttcg
 360
 ctgcgcacgc ccgcgcgcc ggaagg
 386

<210> 1622
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 1622
 Met Glu Ala Pro Arg Val Ala Pro Gly Cys Ser Arg Pro Ser Glu Ala
 1 5 10 15
 Val Arg Leu Gly Ser Ala Gly Pro Ala Gly His Val Arg Arg His Ile
 20 25 30
 Gln Arg His Gly Ala Gly Pro Arg Gly Gly Arg Gln Arg Ala Gly
 35 40 45
 Pro Arg Ser His Gly Gln Gly Arg Arg Arg Phe Ala Ala Gly Ala Gly
 50 55 60
 His Cys Ala Arg Tyr Glu Gly Arg Arg Gly His Lys Ala Arg Pro Ala
 65 70 75 80
 His Leu Pro Ala Ala Leu Leu Pro Ala Ala Ala Leu Gly Gly Ala Arg
 85 90 95
 Arg Pro Leu His Arg Leu Pro Ala Ala Pro Phe Gly Leu Arg Arg Ala
 100 105 110
 Ala Pro Arg Pro Leu Arg Ser Arg Arg Pro Arg Ala Arg Lys
 115 120 125

<210> 1623
 <211> 314
 <212> DNA
 <213> Homo sapiens

<400> 1623
 nctgggtgcc agagcctcgt cgggggtccag ccccagggcc tttgcgagtc agacacttgg
 60
 ggcccttgct tgtggttttt ctgggagctt tgggccgagg gttccccgga cccttccctg
 120
 aacttttccg cagtttcaga ggagagtctg caagtgaag ctgcagtgc tggtccttgc
 180
 gcttggcacc caagcagggc atgggagtct taagtgaac cagggcctca aggacaacag
 240

agagccgcat ggcagggtag acacctggat aaaagtgggt gggggaagcc cactgctgca
 300
 ccccgggcat tgct
 314

<210> 1624
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1624
 Met Pro Gly Val Gln Gln Trp Ala Ser Pro Thr His Phe Tyr Pro Gly
 1 5 10 15
 Val Tyr Pro Ala Met Arg Leu Ser Val Val Leu Glu Ala Leu Val Pro
 20 25 30
 Leu Lys Thr Pro Met Pro Cys Leu Gly Ala Lys His Lys Ala Gln Ser
 35 40 45
 Leu Gln Leu Ser Leu Ala Asp Ser Pro Leu Lys Leu Arg Lys Ser Ser
 50 55 60
 Gly Lys Gly Pro Gly Asn Pro Arg Pro Lys Ala Pro Arg Lys Thr Thr
 65 70 75 80
 Ser Lys Gly Pro Lys Cys Leu Thr Arg Lys Gly Pro Gly Ala Gly Pro
 85 90 95
 Arg Arg Gly Ser Gly His Gln
 100

<210> 1625
 <211> 619
 <212> DNA
 <213> Homo sapiens

<400> 1625
 acgcgtactc agcagcaagt tctgctgagc cccaaatcca cacagactga gcctggacca
 60
 gggctgggccc ctcccttatcc aagccaatcc agggaaacac tgtgctgact tcaaggcaga
 120
 agggacaaga aagcatgact gtgcacaaat tggctttgca gccatctcca ccaggtagcc
 180
 ctgggagcac ctgggaagaa gccgggccaat gcaggagacc caacctcacc ctgcattcag
 240
 aaccgggcct tggaaatggcc tgatctgagc cctagcacc ctgggaagcc gccaccttt
 300
 cttctggcct ctgggaagaa gatgggaatt ttaaggccat gggagaagac actcctggat
 360
 tctttcagct tctccaccca cccctgctc cagatgtaat ctgggaagac tggggagtca
 420
 ggggcacagt gagttggagc aggggattgg agggtttgtg ggacagcctt ccagggcacc
 480
 tcaggagctg aattatttaa gccagctgcc cgtgggcccc gctcccagcc cttcctgttt
 540
 acacagactc cgtccatagc agacaccttc ccagagcctg ggtgacaata ggctgggtgt
 600
 gttttctgca atcttatag
 619

<210> 1626
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1626
 Met Asp Gly Val Cys Val Asn Arg Lys Gly Trp Glu Arg Gly Pro Arg
 1 5 10 15
 Ala Ala Gly Leu Asn Asn Ser Ala Pro Glu Val Pro Trp Lys Ala Val
 20 25 30
 Pro Gln Thr Leu Gln Ser Pro Ala Pro Thr His Cys Ala Pro Asp Ser
 35 40 45
 Pro Val Phe Pro Asp Tyr Ile Trp Ser Arg Gly Trp Val Glu Lys Leu
 50 55 60
 Lys Glu Ser Arg Ser Val Phe Ser His Gly Leu Lys Ile Pro Ile Phe
 65 70 75 80
 Phe Pro Glu Ala Arg Arg Lys Val Gly Gly Phe Pro Gly Val Leu Gly
 85 90 95
 Leu Arg Ser Gly His Ser Lys Ala Arg Phe
 100 105

<210> 1627
 <211> 481
 <212> DNA
 <213> Homo sapiens

<400> 1627
 naccggtgcg ttgtgcccacat gccttgctga acaaggccat ataggccgta ccgacgtgag
 60
 gatcaccagt gggcgagggg gcaacgcgcg tgcgcgcggg atgcaaatca gtcacgatga
 120
 cacgaagtct atcgggatcc gctgacagac tccggtaaag ttcccgccat ggcagaacct
 180
 actggaaacc cggctgagtc cagctcggac ttcattcatc aggttggttcg cgcggacatc
 240
 caacaggaca cctacggcgg gcgcgtccag acccgggttc cactgagcc taacggctac
 300
 ctccacattg gccacgcgaa ggccatcgtc accgatttcg gcgttgccga ggatttcggc
 360
 ggcacctgca acctgagact tgatgatact aatccaggca ccgaggaaac cgagtatgtc
 420
 gagtcatcgt ttgcagacat tgagtgggta gggtactccc cggcccacgt tgtccacgcg
 480
 t
 481

<210> 1628
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1628
 Met Ala Glu Pro Thr Gly Asn Pro Ala Glu Ser Ser Ser Asp Phe Ile

```
<210> 1629
<211> 4519
<212> DNA
<213> Homo sapiens
```

```

<400> 1629
ccaaattgct ggggaatgtcc aaagtgtctac caggaggaca gctcggagaa agcccagaag
60
cggaaaatgg aagagagtga cgaagaagct gtgcaagcca aagtcctgcg gcccctgcgg
120
agctgcgatg agcctctcac gccccgcct cattcaccca cttccatgct gcagctcatc
180
catgacccgg tttccccccg gggatatggtg actcgggtcat cccctggggc tggccccagc
240
gaccaccaca gtgccagccg cgatgagcgc ttcaaacggc ggcagttgct gcggctgcag
300
gccacagagc gcaccatggt acgggaaaaag gagaacaatc ccagcggcaa aaaggagctg
360
tctgaagtgt agaaagccaa gatccgggga tcgtacctca ctgtcacgct acagaggccc
420
accaaagagc tccacgggac atccattgtg cccaagctgc aggccatcac ggcctcctct
480
gccaaccttc gccattcccc ccgtgtgcta gtgcagcact gccagccccg aacccccag
540
cgtgggggatg aggaggggct ggggggagag gaggaggaaag aggaggagga ggaggaggaa
600
gatgacagtg cagaggaggg ggggtgcagcc aggctgaatg gccggggcag ttggggtcag
660
gatggagacg aaagctggat gcagcgggag gtctggatgt ctgtcttccg ctacctcagc
720
cgcagagaac tttgtgaatg tatgcgagtg tgcaagacgt ggtataaatg gtgctgcgac
780
aagagacttt ggacaaaaat tgacttgagt aggtgtaagg ccattgtgcc ccaggccctc
840
agtggcatca tcaagaggca gccagtcagc cttgacctca gttggaccaa catctctaaa
900
aagcaactga catggctcgt caataggctg ccaggactga aagacctcct cctagcaggc
960
tgctcctggg ctgcagtcct tgccctcagc acctccagct gcccccttct caggaccctt
1020

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gatcttcggt gggcagtagg aatcaaggac cctcaaattc gggacttgct tactccaccg
1080
gctgataaac caggtcagga caatcgcagc aagctccgga acatgaccga cttccggctg
1140
gcaggccttg acatcacaga tgccacgctt cgcctcataa ttcgccacat gccctcctg
1200
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1260
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1320
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1380
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1440
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1560
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1620
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1680
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1740
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1860
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1980
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2040
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2100
gcactcgtgc ttgttcacat aattaggttt cccacccag cctaccgac ttacttgcta
2160
gtctctatga ggtccttatt gcacttattg gggttgaagc tcttcagagg agctggaact
2220
gtctacccca gggacacacc catttcgttg ctaccgaagt ggattctgag acaggcacca
2280
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2580
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2640

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2700
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2760
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2820
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2880
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2940
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3180
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3240
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3300
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3360
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3420
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3480
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3540
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3660
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3720
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3780
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3840
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3900
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3960
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4020
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4080
taaaactcct aaagtcactt atgtttaaag ggtttggttg tgttttttgt ttttcggaga
4140
aatattgtaa atatataatt ttttgttgct gatttagagt caatctccaa tgttgtgcta
4200
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4260

attgagggtta ttttgggcca gagaaggagg aagctagttg gactttgttt tgttttccaa
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 aagttctcca ctattggttt tagagagagc aaggacatct ttcctctgac acgtgggaat
 4380
 gggtgatatt tgtgtaataa aattttttaa agacaaaaaa agaaatagcc tccaatggga
 4440
 aatattttta ttttaggttt gttttgttt gggggttttt gtttttttaa aaaaataaaa
 4500
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 4519

<210> 1630
 <211> 496
 <212> PRT
 <213> Homo sapiens

<400> 1630
 Pro Asn Cys Trp Glu Cys Pro Lys Cys Tyr Gln Glu Asp Ser Ser Glu
 1 5 10 15
 Lys Ala Gln Lys Arg Lys Met Glu Glu Ser Asp Glu Glu Ala Val Gln
 20 25 30
 Ala Lys Val Leu Arg Pro Leu Arg Ser Cys Asp Glu Pro Leu Thr Pro
 35 40 45
 Pro Pro His Ser Pro Thr Ser Met Leu Gln Leu Ile His Asp Pro Val
 50 55 60
 Ser Pro Arg Gly Met Val Thr Arg Ser Ser Pro Gly Ala Gly Pro Ser
 65 70 75 80
 Asp His His Ser Ala Ser Arg Asp Glu Arg Phe Lys Arg Arg Gln Leu
 85 90 95
 Leu Arg Leu Gln Ala Thr Glu Arg Thr Met Val Arg Glu Lys Glu Asn
 100 105 110
 Asn Pro Ser Gly Lys Lys Glu Leu Ser Glu Val Glu Lys Ala Lys Ile
 115 120 125
 Arg Gly Ser Tyr Leu Thr Val Thr Leu Gln Arg Pro Thr Lys Glu Leu
 130 135 140
 His Gly Thr Ser Ile Val Pro Lys Leu Gln Ala Ile Thr Ala Ser Ser
 145 150 155 160
 Ala Asn Leu Arg His Ser Pro Arg Val Leu Val Gln His Cys Pro Ala
 165 170 175
 Arg Thr Pro Gln Arg Gly Asp Glu Glu Gly Leu Gly Gly Glu Glu Glu
 180 185 190
 Glu Glu Glu Glu Glu Glu Glu Asp Asp Ser Ala Glu Glu Gly Gly
 195 200 205
 Ala Ala Arg Leu Asn Gly Arg Gly Ser Trp Ala Gln Asp Gly Asp Glu
 210 215 220
 Ser Trp Met Gln Arg Glu Val Trp Met Ser Val Phe Arg Tyr Leu Ser
 225 230 235 240
 Arg Arg Glu Leu Cys Glu Cys Met Arg Val Cys Lys Thr Trp Tyr Lys
 245 250 255
 Trp Cys Cys Asp Lys Arg Leu Trp Thr Lys Ile Asp Leu Ser Arg Cys
 260 265 270
 Lys Ala Ile Val Pro Gln Ala Leu Ser Gly Ile Ile Lys Arg Gln Pro
 275 280 285
 Val Ser Leu Asp Leu Ser Trp Thr Asn Ile Ser Lys Lys Gln Leu Thr

```

      290              295              300
Trp Leu Val Asn Arg Leu Pro Gly Leu Lys Asp Leu Leu Leu Ala Gly
305              310              315              320
Cys Ser Trp Ser Ala Val Ser Ala Leu Ser Thr Ser Ser Cys Pro Leu
      325              330              335
Leu Arg Thr Leu Asp Leu Arg Trp Ala Val Gly Ile Lys Asp Pro Gln
      340              345              350
Ile Arg Asp Leu Leu Thr Pro Pro Ala Asp Lys Pro Gly Gln Asp Asn
      355              360              365
Arg Ser Lys Leu Arg Asn Met Thr Asp Phe Arg Leu Ala Gly Leu Asp
      370              375              380
Ile Thr Asp Ala Thr Leu Arg Leu Ile Ile Arg His Met Pro Leu Leu
385              390              395              400
Ser Arg Leu Asp Leu Ser His Cys Ser His Leu Thr Asp Gln Ser Ser
      405              410              415
Asn Leu Leu Thr Ala Val Gly Ser Ser Thr Arg Tyr Ser Leu Thr Glu
      420              425              430
Leu Asn Met Ala Gly Cys Asn Lys Leu Thr Asp Gln Thr Leu Ile Tyr
      435              440              445
Leu Arg Arg Ile Ala Asn Val Thr Leu Ile Asp Leu Arg Gly Cys Lys
      450              455              460
Gln Ile Thr Arg Lys Ala Cys Glu His Phe Ile Ser Asp Leu Ser Ile
465              470              475              480
Asn Ser Leu Tyr Cys Leu Ser Asp Glu Lys Leu Ile Gln Lys Ile Ser
      485              490              495

```

<210> 1631
 <211> 330
 <212> DNA
 <213> Homo sapiens

```

<400> 1631
acgcgtgctc agccaagcct tagatgaaaa tgcgcttgct gacttttgtg cgatgcaatg
60
tcagaacccg aacacacgtg cttcagacat ggcgggatgg aagacacttc agactctttt
120
ccatgttgac tctcgcgacg agcttggtga gttgcttggc ttttcgaaag acgacattac
180
caaccaagtt cagcaagctg tgggcgcctt gggtttaccg ccactagaag atgaaaacgc
240
acaaggtgaa gatccggcgt cgcaggtccc gccagtcacc gacgaggacc ccactgcttt
300
cttcgatcaa gttccagatg tgcctctaga
330

```

<210> 1632
 <211> 92
 <212> PRT
 <213> Homo sapiens

```

<400> 1632
Met Gln Cys Gln Asn Pro Asn Thr Arg Ala Ser Asp Met Ala Gly Trp
1          5          10          15
Lys Thr Leu Gln Thr Leu Phe His Val Asp Ser Arg Asp Glu Leu Val

```

```

                20                25                30
Glu Leu Leu Gly Phe Ser Lys Asp Asp Ile Thr Asn Gln Val Gln Gln
      35                40                45
Ala Val Gly Ala Leu Gly Leu Pro Pro Leu Glu Asp Glu Asn Ala Gln
      50                55                60
Gly Glu Asp Pro Ala Ser Gln Val Pro Pro Val Thr Asp Glu Asp Pro
65                70                75                80
Thr Ala Phe Phe Asp Gln Val Pro Asp Val Pro Leu
                85                90

```

<210> 1633
 <211> 259
 <212> DNA
 <213> Homo sapiens

```

<400> 1633
nggggggacgt tggctatcaa tcttgtcgga gctttcgtac tggcgacttt gctcgagctg
60
ctcgtccacg ctggccctgg cccaggggtt cgtcgagcgg tgcggctatg catcggtacc
120
ggattgtag gtggatttac gacttattcc gccctcacgg tggaaaccgg ccaacgtgtg
180
atgtcagggc agtgggttatg ggggtattgcc tatcttttga cgagtgtcgt ggcaggtgca
240
ttgttggcat gggtcatga
259

```

<210> 1634
 <211> 86
 <212> PRT
 <213> Homo sapiens

```

<400> 1634
Xaa Gly Thr Leu Ala Ile Asn Leu Val Gly Ala Phe Val Leu Ala Thr
1      5      10      15
Leu Leu Glu Leu Leu Val His Ala Gly Pro Gly Pro Gly Val Arg Arg
      20      25      30
Ala Val Arg Leu Cys Ile Gly Thr Gly Leu Leu Gly Gly Phe Thr Thr
      35      40      45
Tyr Ser Ala Leu Thr Val Glu Thr Gly Gln Arg Val Met Ser Gly Gln
      50      55      60
Trp Leu Trp Gly Ile Ala Tyr Leu Leu Thr Ser Val Val Ala Gly Ala
65                70                75                80
Leu Leu Ala Trp Val Met
                85

```

<210> 1635
 <211> 792
 <212> DNA
 <213> Homo sapiens

```

<400> 1635
nngtcctttt ttatgaaccg gcggactcgg ttggcgttgt ggggcagggg gtcggtggagc
60

```

aagatggcgg ctcattctgtc ctacggccga gtgaacctaa acgtgttgcg cgaggcgggtg
 120
 cgtcgcgagc tgcgcgagtt cctggacaag tgcgcaggaa gcaaggcaat agtttgggat
 180
 gaatacctaa ctggaccctt tggcctgatt gcacagtatt cactattgaa ggaacatgaa
 240
 gtggaaaaaa tgttcacact taaaggaaat cgtttgccgg cagctgatgt gaagaatata
 300
 attttttttg tcagaccag gctagagttg atggatataa tcgctgaaaa cgtgctcagt
 360
 gaagatagac gaggcccaac gagagatttt catattctgt ttgtgccacg ccgtagcctg
 420
 ttgtgcgaac agcgggtgaa ggatctgggt gtcttgggat cctttattca caggaggag
 480
 tacagcttag atctcattcc attcgatggg gatctcttat ccatggaatc agagggtgca
 540
 ttcaaagagt gctacctgga gggtgaccag acgagcctgt accacgcagc caaggggctg
 600
 atgaccctgc aagctctgta tggaacgatc cccagatct ttgggaaagg agaatgcgct
 660
 cgggtgagaa ccggctgctt tgtgggtgta aaggagggcc cttcacaccc caaaagggag
 720
 gaggaacggg aagctcctta caaacaatt cagttgatct taattattta tgaatactgt
 780
 actcatgaat tc
 792

<210> 1636

<211> 243

<212> PRT

<213> Homo sapiens

<400> 1636

Met	Ala	Ala	His	Leu	Ser	Tyr	Gly	Arg	Val	Asn	Leu	Asn	Val	Leu	Arg
1				5					10					15	
Glu	Ala	Val	Arg	Arg	Glu	Leu	Arg	Glu	Phe	Leu	Asp	Lys	Cys	Ala	Gly
			20					25					30		
Ser	Lys	Ala	Ile	Val	Trp	Asp	Glu	Tyr	Leu	Thr	Gly	Pro	Phe	Gly	Leu
		35				40						45			
Ile	Ala	Gln	Tyr	Ser	Leu	Leu	Lys	Glu	His	Glu	Val	Glu	Lys	Met	Phe
	50				55					60					
Thr	Leu	Lys	Gly	Asn	Arg	Leu	Pro	Ala	Ala	Asp	Val	Lys	Asn	Ile	Ile
65				70						75				80	
Phe	Phe	Val	Arg	Pro	Arg	Leu	Glu	Leu	Met	Asp	Ile	Ile	Ala	Glu	Asn
			85					90					95		
Val	Leu	Ser	Glu	Asp	Arg	Arg	Gly	Pro	Thr	Arg	Asp	Phe	His	Ile	Leu
		100					105					110			
Phe	Val	Pro	Arg	Arg	Ser	Leu	Leu	Cys	Glu	Gln	Arg	Leu	Lys	Asp	Leu
		115				120						125			
Gly	Val	Leu	Gly	Ser	Phe	Ile	His	Arg	Glu	Glu	Tyr	Ser	Leu	Asp	Leu
	130				135					140					
Ile	Pro	Phe	Asp	Gly	Asp	Leu	Leu	Ser	Met	Glu	Ser	Glu	Gly	Ala	Phe
145				150					155					160	
Lys	Glu	Cys	Tyr	Leu	Glu	Gly	Asp	Gln	Thr	Ser	Leu	Tyr	His	Ala	Ala

```

                165                170                175
Lys Gly Leu Met Thr Leu Gln Ala Leu Tyr Gly Thr Ile Pro Gln Ile
                180                185                190
Phe Gly Lys Gly Glu Cys Ala Arg Val Arg Thr Gly Cys Phe Val Val
                195                200                205
Val Lys Glu Gly Pro Ser His Pro Lys Arg Glu Glu Glu Arg Glu Ala
                210                215                220
Pro Tyr Lys Gln Ile Gln Leu Ile Leu Ile Ile Tyr Glu Tyr Cys Thr
225                230                235                240
His Glu Phe

```

<210> 1637
 <211> 357
 <212> DNA
 <213> Homo sapiens

```

<400> 1637
ntcatgatga cacagacccc cgcgcaccca ggcttgatct ccctgcaagg catcggcaaa
60
cgttatcagt tggccgggca aaagctgtcc attctcaatg acgtgtgcct gtccatctcc
120
cgcggtgaca gctgcggcat cctcggcgcc tccggttccg gcaagagcac cctgctcaat
180
atccttggcc tgctggacct gcccaacagc ggccagtacc actttgccgg ccacgatatt
240
ttggcgctca ccccggaaga actgtcggcg atccgcaact cagntnnaat ggttgtgttc
300
cagagcttca acctgtgtcc ggcctcagc gccctggaca acgtcgccct gcccttg
357

```

<210> 1638
 <211> 119
 <212> PRT
 <213> Homo sapiens

```

<400> 1638
Xaa Met Met Thr Gln Thr Pro Ala His Pro Gly Leu Ile Ser Leu Gln
1      5      10      15
Gly Ile Gly Lys Arg Tyr Gln Leu Ala Gly Gln Lys Leu Ser Ile Leu
20     25     30
Asn Asp Val Cys Leu Ser Ile Ser Arg Gly Asp Ser Cys Gly Ile Leu
35     40     45
Gly Ala Ser Gly Ser Gly Lys Ser Thr Leu Leu Asn Ile Leu Gly Leu
50     55     60
Leu Asp Leu Pro Asn Ser Gly Gln Tyr His Phe Ala Gly His Asp Ile
65     70     75     80
Leu Ala Leu Thr Pro Asp Glu Leu Ser Ala Ile Arg Asn Ser Xaa Xaa
85     90     95
Met Val Val Phe Gln Ser Phe Asn Leu Leu Pro Arg Leu Ser Ala Leu
100    105    110
Asp Asn Val Ala Leu Pro Leu
115

```

<210> 1639
 <211> 396
 <212> DNA
 <213> Homo sapiens

<400> 1639
 acgcgtgtac gtgcgcgtgt gatttcacat gccctcaaag atattcttac tgaaggcgat
 60
 aaagttatcg ttatgggaca taagcgacca gatttagatg ctataggtgc agctatcgga
 120
 gtttcgcgct ttgcatcaat gaataattta gaggcattta tcgttcttaa tgattctgat
 180
 attgatccga cattacgtcg tgttatggat gagattgata agaaaccgga actaaaagaa
 240
 cgctttgtaa catcggatga ggcttgggat atgatgactt ctaagacgac tgtcgttggt
 300
 gtagatacac ataaacctga aatggcttta gatgaaaatg tcttaaataa agcaaaccgc
 360
 aaagtagtca ttgatcatca tagacgtggc gaaact
 396

<210> 1640
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1640
 Thr Arg Val Arg Ala Arg Val Ile Ser His Ala Leu Lys Asp Ile Leu
 1 5 10 15
 Thr Glu Gly Asp Lys Val Ile Val Met Gly His Lys Arg Pro Asp Leu
 20 25 30
 Asp Ala Ile Gly Ala Ala Ile Gly Val Ser Arg Phe Ala Ser Met Asn
 35 40 45
 Asn Leu Glu Ala Phe Ile Val Leu Asn Asp Ser Asp Ile Asp Pro Thr
 50 55 60
 Leu Arg Arg Val Met Asp Glu Ile Asp Lys Lys Pro Glu Leu Lys Glu
 65 70 75 80
 Arg Phe Val Thr Ser Asp Glu Ala Trp Asp Met Met Thr Ser Lys Thr
 85 90 95
 Thr Val Val Val Val Asp Thr His Lys Pro Glu Met Val Leu Asp Glu
 100 105 110
 Asn Val Leu Asn Lys Ala Asn Arg Lys Val Val Ile Asp His His Arg
 115 120 125
 Arg Gly Glu Thr
 130

<210> 1641
 <211> 376
 <212> DNA
 <213> Homo sapiens

<400> 1641
 ttatcagcaa acgacagcag acaagagctc ctggggctct ggggaaatgc tgctgcctgc
 60

tggccaaacg aactgatgga tgggctcttg gagtgggaga gactgggcag aagctgtgtg
 120
 ggggtgggtga ctcccaacct aaagaaccca ctgagacata tgtggcttcc ctctccacc
 180
 ttcattgcct ctttccgtct agatgctggc aaggggggac ttggtggaca aagagagcta
 240
 ctattcatc aggagctatg ttacaccagt cactttacat gtgccacttg ctctgggta
 300
 aactgtgcct cccctcactc atatgttgaa gtcctaacc taactacctc agaatgggac
 360
 gttatttga aaaaag
 376

<210> 1642
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 1642
 Met Asp Gly Leu Leu Glu Trp Glu Arg Leu Gly Arg Ser Cys Val Gly
 1 5 10 15
 Trp Val Thr Pro Asn Leu Lys Asn Pro Leu Arg His Met Trp Leu Pro
 20 25 30
 Ser Ser Thr Phe Ile Ala Ser Phe Arg Leu Asp Ala Gly Lys Gly Gly
 35 40 45
 Leu Gly Gly Gln Arg Glu Leu Leu Phe Ile Gln Glu Leu Cys Tyr Thr
 50 55 60
 Ser His Phe Thr Cys Ala Thr Cys Ser Gly Leu Asn Cys Ala Ser Pro
 65 70 75 80
 His Ser Tyr Val Glu Val Leu Thr Leu Thr Thr Ser Glu Trp Asp Val
 85 90 95
 Ile Trp Lys Lys
 100

<210> 1643
 <211> 494
 <212> DNA
 <213> Homo sapiens

<400> 1643
 aagcttccag aattccatag gaaccagct gcccttcttg tacctcagtg aggtggagcc
 60
 gagtgtctga gagcaggtgc aggagaaggt gtgggctcca cctgggcctc tgaagccagg
 120
 ggccagaatc cccagatcta ggtccaagag ggggctccat gacctcccca tgctgctcct
 180
 ctgcttgat ccaggatata agaaaggagg ggcacacact gtgggggaac tctggggctc
 240
 cctgtgtgca tcagcgagtc ccgggtctgc cccaccagga tgcaaagggc ctggctgctc
 300
 cagcccatg ctcacagccc tataagtgca cgatggcacc ctatatcacc taagcggggc
 360
 tgtgcctcct gaggccttag ggacaccaga atgagcccc ctcggcggag tctggctctg
 420

ggtgtgtgga gatgccacct gggacgggaa ccccaggtgc atggagcccc actgcagaca
 480
 ccatcccccg tgtg
 494

<210> 1644
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1644
 Met Gly Leu Glu Gln Pro Gly Pro Leu His Pro Gly Gly Ala Asp Pro
 1 5 10 15
 Gly Leu Ala Asp Ala His Arg Gly Pro Gln Ser Ser Pro Thr Val Cys
 20 25 30
 Ala Pro Pro Phe Leu Tyr Pro Gly Ser Lys Gln Arg Ser Ser Met Gly
 35 40 45
 Arg Ser Trp Ser Pro Leu Leu Asp Leu Asp Leu Gly Ile Leu Ala Pro
 50 55 60
 Gly Phe Arg Gly Pro Gly Gly Ala His Thr Phe Ser Cys Thr Cys Ser
 65 70 75 80
 Gln Thr Leu Gly Ser Thr Ser Leu Arg Tyr Gln Lys Gly Ser Trp Val
 85 90 95
 Pro Met Glu Phe Trp Lys Leu
 100

<210> 1645
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1645
 nnagatctgt cggataatgg ctttggctcc gacatggtga cactggtgct tgccatcggg
 60
 aggagccggg ctctgaaaca cgtggccctt ggaaggaact tcaacgttcg gtgcaaggag
 120
 accctggacg atgtcctgca tcggatagcc cagctaatagc aggatgacga ctgtcctttg
 180
 cagtcactat ccgtggctga gtcgcggttg aagcaggggtg ccagcatcct gatccggggt
 240
 ttgggcacca atcctaaact gacagcgctg gatatcagtg gcaatgccat aggggatgct
 300
 ggggccaaga tgctagccaa ggctctacgc
 330

<210> 1646
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1646
 Xaa Asp Leu Ser Asp Asn Gly Phe Gly Ser Asp Met Val Thr Leu Val
 1 5 10 15
 Leu Ala Ile Gly Arg Ser Arg Ser Leu Lys His Val Ala Leu Gly Arg


```

                20                25                30
Asn Phe Asn Val Arg Cys Lys Glu Thr Leu Asp Asp Val Leu His Arg
      35                40                45
Ile Ala Gln Leu Met Gln Asp Asp Cys Pro Leu Gln Ser Leu Ser
      50                55                60
Val Ala Glu Ser Arg Leu Lys Gln Gly Ala Ser Ile Leu Ile Arg Ala
65                70                75                80
Leu Gly Thr Asn Pro Lys Leu Thr Ala Leu Asp Ile Ser Gly Asn Ala
      85                90                95
Ile Gly Asp Ala Gly Ala Lys Met Leu Ala Lys Ala Leu Arg
      100                105                110

```

<210> 1647
 <211> 501
 <212> DNA
 <213> Homo sapiens

```

<400> 1647
aggcgcgtcg gtgatccgcg gcggcggcag cggcgcttcc tgctaggacc ggccggggcc
60
gtaccggagg ctcgggctcc accgaccctc ctcccacccc ctcccactca ccctctgggc
120
cgcgactgcg cagggcgggg ccggccgaac catgggccgc ggtgtgggct aagctggtgg
180
ccccggcttt agactggacc ccacaatgtt tgcagagatg ttcaggcacg cgggagctga
240
ttacacacaa tgaatggggg caatgagagc agtggagcag acagagctgg gggccctgtg
300
gccacatctg tcccatcgg ctggcagcgc tgtgtgcgag aggggtgctgt gctctacac
360
agtccaagtg gcacagagct gtcttccttg gagcaaacc ggagctacct cctcagcgat
420
gggacctgca agtgcggtct ggagtgtcca cttaatgtcc ccaaggtttt caactttgac
480
cctttggccc cggtgacccc g
501

```

<210> 1648
 <211> 84
 <212> PRT
 <213> Homo sapiens

```

<400> 1648
Met Asn Gly Gly Asn Glu Ser Ser Gly Ala Asp Arg Ala Gly Gly Pro
1      5      10      15
Val Ala Thr Ser Val Pro Ile Gly Trp Gln Arg Cys Val Arg Glu Gly
      20      25      30
Ala Val Leu Tyr Ile Ser Pro Ser Gly Thr Glu Leu Ser Ser Leu Glu
      35      40      45
Gln Thr Arg Ser Tyr Leu Leu Ser Asp Gly Thr Cys Lys Cys Gly Leu
      50      55      60
Glu Cys Pro Leu Asn Val Pro Lys Val Phe Asn Phe Asp Pro Leu Ala
65      70      75      80
Pro Val Thr Pro

```

<210> 1649
 <211> 441
 <212> DNA
 <213> Homo sapiens

<400> 1649
 gcgtcggcag ctgaacgggt gctactggca atcggcgaac ccgaactgct ggatacgtcc
 60
 accaactcac ggttgtcgcg catcttctcc aacaagggtga tccggcgcta tccggccttt
 120
 gaagacttcc acgggatgga agaatgcac gatcagatcg ttcgtatatt ccgccacgcc
 180
 gcccaaggcc tggaagagaa gaaacagatc ctttacctgc tcggccccgt cggcggcggt
 240
 aaatcgcccc tggccgaaaa gctgaaacag ctgatcgaga aggtccccct ctacgccatc
 300
 aagggtcgc cggctcttga gtcgcccttg gggttgttca acgccactga agacggcgcg
 360
 atcctcgagg aagacttcgg gattccacgg cgttacctga acaccatcat gtcgccctgg
 420
 gcgaccaagc gcctggccga a
 441

<210> 1650
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 1650
 Ala Ser Ala Ala Glu Arg Val Leu Leu Ala Ile Gly Glu Pro Glu Leu
 1 5 10 15
 Leu Asp Thr Ser Thr Asn Ser Arg Leu Ser Arg Ile Phe Ser Asn Lys
 20 25 30
 Val Ile Arg Arg Tyr Pro Ala Phe Glu Asp Phe His Gly Met Glu Glu
 35 40 45
 Cys Ile Asp Gln Ile Val Ser Tyr Phe Arg His Ala Ala Gln Gly Leu
 50 55 60
 Glu Glu Lys Lys Gln Ile Leu Tyr Leu Leu Gly Pro Val Gly Gly Gly
 65 70 75 80
 Lys Ser Ser Leu Ala Glu Lys Leu Lys Gln Leu Ile Glu Lys Val Pro
 85 90 95
 Phe Tyr Ala Ile Lys Gly Ser Pro Val Phe Glu Ser Pro Leu Gly Leu
 100 105 110
 Phe Asn Ala Thr Glu Asp Gly Ala Ile Leu Glu Glu Asp Phe Gly Ile
 115 120 125
 Pro Arg Arg Tyr Leu Asn Thr Ile Met Ser Pro Trp Ala Thr Lys Arg
 130 135 140
 Leu Ala Glu
 145

<210> 1651
 <211> 408

<212> DNA

<213> Homo sapiens

<400> 1651

```

ncccgccgac cctccggcat cctggttata gtcacctga aggaatccgg agccccgactg
60
cgccgcgagc tttccgaacg cctcgaggat tacgcgcac aaacttccat ggtgcgttcc
120
gtacactccc tcgcattcgc gttgctgcgc acagcggccg aggaggagct gcgccttatt
180
accggtgcgg acnaagacgc cgttatccgc gagctgctca cgggccaagc agaagacgga
240
catggctcgt ggccccgcca gatgcgcccc gcgtggaatn natgtgggct ttcgcggcag
300
ctgcgcgatt tccttttgcg ttccattgaa cgcggcctgg gaccgggtga cctagagagc
360
ctcgggtgcc agcacggccg ccccatgtgg tctgcggcgg gtgaattc
408

```

<210> 1652

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1652

```

Xaa Ala Asp Pro Ser Gly Ile Leu Val Ile Ala Pro Ser Lys Glu Ser
1      5      10      15
Gly Ala Arg Leu Arg Arg Glu Leu Ser Glu Arg Leu Glu Asp Tyr Ala
20      25      30
Ala Gln Thr Ser Met Val Arg Ser Val His Ser Leu Ala Phe Ala Leu
35      40      45
Leu Arg Thr Ala Ala Glu Glu Glu Leu Arg Leu Ile Thr Gly Ala Asp
50      55      60
Xaa Asp Ala Val Ile Arg Glu Leu Leu Thr Gly Gln Ala Glu Asp Gly
65      70      75      80
His Gly Ser Trp Pro Ala Glu Met Arg Pro Ala Trp Asn Xaa Cys Gly
85      90      95
Leu Ser Arg Gln Leu Arg Asp Phe Leu Leu Arg Ser Ile Glu Arg Gly
100     105     110
Leu Gly Pro Gly Asp Leu Glu Ser Leu Gly Ala Glu His Gly Arg Pro
115     120     125
Met Trp Ser Ala Ala Gly Glu Phe
130     135

```

<210> 1653

<211> 398

<212> DNA

<213> Homo sapiens

<400> 1653

```

ccagcctctc tccgaccgcg tcctttcttc ggccatacgg cacccaatgt cgcgtcacca
60
tcacccgcgc acatggccat cgctccaccg gacgagttga gtgacaagat ccggtgcatt
120

```

ctgcgcaccc ttgaacctgg tgacagtgtg aaggagattc tcaacacgtc gcgtgtcgtc
 180
 ggcattgacg tccagagcag cctgcttatt gctgggtgctc agcatctgta cttgttggac
 240
 gattacttcc agcgtccgaa cggtgaaatc gtcaatgtct gggaagctcc gccacacgag
 300
 cgcgatgcct tgatcgtggc ggccggtgtc gcacaggtgg cacaagcag cacacccgtg
 360
 cagatatggc gctgggaaca gctccgacct tgtctaga
 398

<210> 1654

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1654

Pro	Ala	Ser	Leu	Arg	Pro	Arg	Pro	Ser	Ser	Gly	His	Thr	Ala	Pro	Asn
1				5					10					15	
Val	Ala	Ser	Pro	Ser	Pro	Ala	His	Met	Ala	Ile	Ala	Pro	Pro	Asp	Glu
		20						25					30		
Leu	Ser	Asp	Lys	Ile	Arg	Cys	Ile	Leu	Arg	Thr	Leu	Glu	Pro	Gly	Asp
	35					40					45				
Ser	Val	Lys	Glu	Ile	Leu	Asn	Thr	Ser	Arg	Val	Val	Gly	Ile	Asp	Val
	50				55					60					
Gln	Ser	Ser	Leu	Leu	Ile	Ala	Gly	Ala	Gln	His	Leu	Tyr	Leu	Leu	Asp
65				70					75				80		
Asp	Tyr	Phe	Gln	Arg	Pro	Asn	Gly	Glu	Ile	Val	Asn	Val	Trp	Glu	Ala
			85				90						95		
Pro	Pro	His	Glu	Arg	Asp	Ala	Leu	Ile	Val	Ala	Ala	Gly	Val	Ala	Gln
		100					105						110		
Val	Ala	Gln	Ser	Ser	Thr	Pro	Val	Gln	Ile	Trp	Arg	Trp	Glu	Gln	Leu
		115				120						125			
Arg	Leu	Cys	Leu												
			130												

<210> 1655

<211> 1115

<212> DNA

<213> Homo sapiens

<400> 1655

nccctgacct gacctgtcct cgccatggcc gaggcgcct ccggcgccgg gggcacgtcc
 60
 ctggagggcg agcgtggcaa gagggccccg ccggagggcg agcctgcagc cccggcgctcc
 120
 ggagttctgg ataagctttt cggaagcgcg ctctctcagg ctggctcgta cctggtgtcc
 180
 cacaaggcgt ggatgaagac ggtgcctaca gagaactgcg acgtgctgat gaccttccca
 240
 gacacgaccg atgaccacac gctgctatgg ctgctgaacc acatccgcgt gggcattccc
 300
 gagctcctcg tgcaagtccg ccaccaccgc cacacgcgtg cctacgcctt ctttgtcacc
 360

gccacgtatg agagcctact ccgagggggcc gacgagctgg gtctgcgcaa agcagtgaag
 420
 gccgagtttg gcggggggcac ccgcggcttc tcctgcgagg aggactttat ctatgagaat
 480
 gtggagagcg agctacgctt cttcacctcc caggaacgcc agagcatcat ccgcttctgg
 540
 ctgcagaatt tgcgtgccaa gcagggagaa gcactccaca acgtgcgctt cctggaggac
 600
 cagccaatca tcccggagct ggcagcacgt gggatcatcc agcagggtgtt ccctgtccac
 660
 gagcagcgta ttctgaaccg cctcatgaag tcatgggtgc aggccgtgtg tgaaaaccag
 720
 cctctagatg acatctgtga ttactttggg gtgaaaattg ccatgtactt cgctggctg
 780
 ggcttctaca cgtcggctat ggtataccca gctgtcttcg ggtctgtcct gtacacattc
 840
 acagaggctg atcagacaag ccgggatgtt tcctgcgtgg tctttgccct cttcaacgtg
 900
 atctggtcga cgctgttctt ataggaatgg aagcgtatag gggctgagct gggatataat
 960
 tgggggacgc tggactcatc ctgggaagcc gtggaggagc cacgccccca gttcaggtgc
 1020
 gtgcgacgta tcatccccat cactcggggc gaggagtctt actaccgccc ctggaagcgg
 1080
 ctgctcttcc agctgcttgt tagcctccgc ctgtg
 1115

<210> 1656

<211> 299

<212> PRT

<213> Homo sapiens

<400> 1656

Met	Ala	Glu	Ala	Ala	Ser	Gly	Ala	Gly	Gly	Thr	Ser	Leu	Glu	Gly	Glu
1			5					10					15		
Arg	Gly	Lys	Arg	Pro	Pro	Pro	Glu	Gly	Glu	Pro	Ala	Ala	Pro	Ala	Ser
			20					25					30		
Gly	Val	Leu	Asp	Lys	Leu	Phe	Gly	Lys	Arg	Leu	Leu	Gln	Ala	Gly	Arg
		35					40					45			
Tyr	Leu	Val	Ser	His	Lys	Ala	Trp	Met	Lys	Thr	Val	Pro	Thr	Glu	Asn
		50				55					60				
Cys	Asp	Val	Leu	Met	Thr	Phe	Pro	Asp	Thr	Thr	Asp	Asp	His	Thr	Leu
65					70				75					80	
Leu	Trp	Leu	Leu	Asn	His	Ile	Arg	Val	Gly	Ile	Pro	Glu	Leu	Ile	Val
			85					90					95		
Gln	Val	Arg	His	His	Arg	His	Thr	Arg	Ala	Tyr	Ala	Phe	Phe	Val	Thr
			100					105					110		
Ala	Thr	Tyr	Glu	Ser	Leu	Leu	Arg	Gly	Ala	Asp	Glu	Leu	Gly	Leu	Arg
		115					120				125				
Lys	Ala	Val	Lys	Ala	Glu	Phe	Gly	Gly	Gly	Thr	Arg	Gly	Phe	Ser	Cys
	130					135					140				
Glu	Glu	Asp	Phe	Ile	Tyr	Glu	Asn	Val	Glu	Ser	Glu	Leu	Arg	Phe	Phe
145				150					155					160	
Thr	Ser	Gln	Glu	Arg	Gln	Ser	Ile	Ile	Arg	Phe	Trp	Leu	Gln	Asn	Leu

```

                165                170                175
Arg Ala Lys Gln Gly Glu Ala Leu His Asn Val Arg Phe Leu Glu Asp
                180                185                190
Gln Pro Ile Ile Pro Glu Leu Ala Ala Arg Gly Ile Ile Gln Gln Val
                195                200                205
Phe Pro Val His Glu Gln Arg Ile Leu Asn Arg Leu Met Lys Ser Trp
                210                215                220
Val Gln Ala Val Cys Glu Asn Gln Pro Leu Asp Asp Ile Cys Asp Tyr
225                230                235                240
Phe Gly Val Lys Ile Ala Met Tyr Phe Ala Trp Leu Gly Phe Tyr Thr
                245                250                255
Ser Ala Met Val Tyr Pro Ala Val Phe Gly Ser Val Leu Tyr Thr Phe
                260                265                270
Thr Glu Ala Asp Gln Thr Ser Arg Asp Val Ser Cys Val Val Phe Ala
                275                280                285
Leu Phe Asn Val Ile Trp Ser Thr Leu Phe Leu
                290                295

```

<210> 1657

<211> 333

<212> DNA

<213> Homo sapiens

<400> 1657

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tgtagaggct cgaggtcatc cggaccatgt ggtccaggac gcccccgctcc tccggggcccc
60
gcacggagac gcggcgctcag cacggacagc acgcagtcctg tgagcctctg caggcagttc
120
ttggagccccg cgggcttccc gcgcgccttc agggggcgagg cggcagctcg ggccgggtact
180
tctcccaaaa ctgctccggg caggggagct ccagcagcct ctgcatgaga cggacggcat
240
ccacgcggcc cgtgtaagtg gccactcct gcggcgacat tccacggcgg gggtagcctc
300
gcgtggacat ccgccctgc tagcatcagg gct
333

```

<210> 1658

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1658

```

Met Leu Ala Gly Ala Asp Val His Ala Arg Val Pro Pro Pro Trp Asn
 1             5             10             15
Val Ala Ala Gly Val Gly His Leu His Gly Pro Arg Gly Cys Arg Pro
      20             25             30
Ser His Ala Glu Ala Ala Gly Ala Pro Leu Pro Gly Ala Val Leu Gly
      35             40             45
Glu Val Pro Ala Arg Ala Ala Arg Pro Leu Lys Arg Arg Gly Lys
      50             55             60
Pro Ala Gly Ser Lys Asn Cys Leu Gln Arg Leu Thr Asp Cys Val Leu
      65             70             75             80
Ser Val Leu Thr Pro Arg Leu Arg Ala Gly Pro Gly Gly Arg Gly Arg

```

85 90 95
 Pro Gly Pro His Gly Pro Asp Asp Leu Glu Pro Leu
 100 105

<210> 1659
 <211> 382
 <212> DNA
 <213> Homo sapiens

<400> 1659
 nnaagcttat ttgttattac taatatTTTC cgtgaccaga tgggccgcta tggtgagatt
 60
 tacacaactt acaagatgat tttggatgct attcgtaagg tgcctactgc cactgttctc
 120
 cttaatggag acagtccact tttctacaag ccagctattc caaatcctgt acagtatttt
 180
 ggttttgact tggagaaagg cccagcccaa ctggctcact ataataccga aggaattctc
 240
 tgtcccgact gccaaaggcat cctcaaatat gagcataata cctatgcaaa cttgggcgcc
 300
 tatatctgtg aagactgtgg atgtaaactg cctgatctcg actatcgctt gacagaactg
 360
 gttgagttaa ccaacaatcg cn
 382

<210> 1660
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400> 1660
 Xaa Ser Leu Phe Val Ile Thr Asn Ile Phe Arg Asp Gln Met Gly Arg
 1 5 10 15
 Tyr Gly Glu Ile Tyr Thr Thr Tyr Lys Met Ile Leu Asp Ala Ile Arg
 20 25 30
 Lys Val Pro Thr Ala Thr Val Leu Leu Asn Gly Asp Ser Pro Leu Phe
 35 40 45
 Tyr Lys Pro Ala Ile Pro Asn Pro Val Gln Tyr Phe Gly Phe Asp Leu
 50 55 60
 Glu Lys Gly Pro Ala Gln Leu Ala His Tyr Asn Thr Glu Gly Ile Leu
 65 70 75 80
 Cys Pro Asp Cys Gln Gly Ile Leu Lys Tyr Glu His Asn Thr Tyr Ala
 85 90 95
 Asn Leu Gly Ala Tyr Ile Cys Glu Asp Cys Gly Cys Lys Arg Pro Asp
 100 105 110
 Leu Asp Tyr Arg Leu Thr Glu Leu Val Glu Leu Thr Asn Asn Arg
 115 120 125

<210> 1661
 <211> 524
 <212> DNA
 <213> Homo sapiens

<400> 1661

acgcgtcgat gatcatggag aagacgcggg ccggctcctt gcctgtgacc ttcttgata
 60
 gctgcgggta gtagagctcc aggcctctga ggaaggccac gtagcccttg tggccgggtcc
 120
 gctgcaggat gtccaggagc acaccactt tccgtttgcg gatgaccagg ttgggggtcgc
 180
 tgagcacctg ctctcatca tcagggttca ggaccttga ctgccgcagg taagggtga
 240
 tgcgtgaggg gtcgatgacc gaggtgagcg tcaccggaa gccctccagg acgttccagg
 300
 actcgtcatc gttctcgtag tccgacatgg cctcagcagg caggctgggg agtgtggggc
 360
 agtgctgaga gcgatgccg ctctgcccc caccggggc cagctccac tccttctcag
 420
 acgctggggc agggctctcg tcagggcac gagggggatc agcccaggcg catccaggag
 480
 aggtgcccag ctccgtgtcc catcccacgc ttgatcgtg catg
 524

<210> 1662

<211> 174

<212> PRT

<213> Homo sapiens

<400> 1662

Met	Gln	Arg	Ser	Ser	Val	Gly	Trp	Asp	Thr	Glu	Leu	Gly	Thr	Ser	Pro
1				5					10					15	
Gly	Cys	Ala	Trp	Ala	Asp	Pro	Pro	Arg	Cys	Pro	Asp	Glu	Ser	Pro	Gly
			20					25					30		
Pro	Ala	Ser	Glu	Lys	Glu	Trp	Glu	Leu	Gly	Pro	Gly	Gly	Gly	Arg	Ser
			35				40					45			
Arg	His	Arg	Ser	Gln	His	Cys	Pro	Thr	Leu	Pro	Ser	Leu	Pro	Ala	Glu
	50					55					60				
Ala	Met	Ser	Asp	Tyr	Glu	Asn	Asp	Asp	Glu	Cys	Trp	Asn	Val	Leu	Glu
65					70					75				80	
Gly	Phe	Arg	Val	Thr	Leu	Thr	Ser	Val	Ile	Asp	Pro	Ser	Arg	Ile	Thr
			85					90					95		
Pro	Tyr	Leu	Arg	Gln	Cys	Lys	Val	Leu	Asn	Pro	Asp	Asp	Glu	Gln	
			100					105					110		
Val	Leu	Ser	Asp	Pro	Asn	Leu	Val	Ile	Arg	Lys	Arg	Lys	Val	Gly	Val
	115					120						125			
Leu	Leu	Asp	Ile	Leu	Gln	Arg	Thr	Gly	His	Lys	Gly	Tyr	Val	Ala	Phe
	130					135					140				
Leu	Glu	Ser	Leu	Glu	Leu	Tyr	Tyr	Pro	Gln	Leu	Tyr	Lys	Lys	Val	Thr
145					150					155				160	
Gly	Lys	Glu	Pro	Ala	Arg	Val	Phe	Ser	Met	Ile	Ile	Asp	Ala		
				165						170					

<210> 1663

<211> 321

<212> DNA

<213> Homo sapiens

<400> 1663

nnagtacttg tcatgattac gcctagtttg ggtatctatt tctctcagcg ttctcagatc
 60
 tcccgaaccc aagacgacga ggctcggaca cgcgcttcta tctcgaccct tcaagacgag
 120
 gtcaagaggt ggcacgatcc cgactacgtc cgtgctcagg cgcgctccca gctcggctgg
 180
 gtgatgccgg gcgaaactgg gtatcagggtc attggagaaa acggtaaggt cattggatcg
 240
 acgacttctt tggacgaaaa agatccggcg agtgaagcca gcgctgacgc tcggtggtgg
 300
 caagaggctt gcggatcagt c
 321

<210> 1664

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1664

Xaa	Val	Leu	Val	Met	Ile	Thr	Pro	Ser	Leu	Gly	Ile	Tyr	Phe	Ser	Gln
1				5					10					15	
Arg	Ser	Gln	Ile	Ser	Arg	Thr	Gln	Asp	Asp	Glu	Ala	Arg	Thr	Arg	Ala
		20						25					30		
Ser	Ile	Ser	Thr	Leu	Gln	Asp	Glu	Val	Lys	Arg	Trp	His	Asp	Pro	Asp
		35					40					45			
Tyr	Val	Arg	Ala	Gln	Ala	Arg	Ser	Gln	Leu	Gly	Trp	Val	Met	Pro	Gly
	50				55				60						
Glu	Thr	Gly	Tyr	Gln	Val	Ile	Gly	Glu	Asn	Gly	Lys	Val	Ile	Gly	Ser
65				70				75					80		
Thr	Thr	Ser	Leu	Asp	Glu	Lys	Asp	Pro	Ala	Ser	Glu	Ala	Ser	Ala	Asp
			85					90					95		
Ala	Arg	Trp	Trp	Gln	Glu	Ala	Cys	Gly	Ser	Val					
		100						105							

<210> 1665

<211> 431

<212> DNA

<213> Homo sapiens

<400> 1665

gcttccgaac tcatcaagaa gctcaagagg tataaaatgg ttttgcgctc taccggcggc
 60
 ggcccgaacta tctccggtgg tgaagtactc atgcaacgcg cttttgcgtg gaacttgctc
 120
 atgagtgcta agtcgatggg cattcatacc tgtatcgata cctccggttt tttgggggct
 180
 gcggcaacag atgacttttt agagtctgtt gatttgggtg tgctcgacgt caaatcgggg
 240
 gatgaagaaa tctaccgtgc cctcaccggc agagcgttgc aacctaccat cgattttggt
 300
 gatcgtctca ccgcgctcgg taaagaaatc tggattcggt tcgttggtgg ccccggtatc
 360
 accgactcgg tagagaacgt ggaaaagggt gccgatatcg tccgcagatg gcgcaccgct
 420

gtttcacgcg t
431

<210> 1666
<211> 143
<212> PRT
<213> Homo sapiens

<400> 1666
Ala Ser Glu Leu Ile Lys Lys Leu Lys Arg Tyr Lys Met Val Leu Arg
1 5 10 15
Ser Thr Gly Gly Gly Pro Thr Ile Ser Gly Gly Glu Val Leu Met Gln
20 25 30
Arg Ala Phe Ala Trp Asn Leu Leu Met Ser Ala Lys Ser Met Gly Ile
35 40 45
His Thr Cys Ile Asp Thr Ser Gly Phe Leu Gly Ala Ala Ala Thr Asp
50 55 60
Asp Phe Leu Glu Ser Val Asp Leu Val Leu Leu Asp Val Lys Ser Gly
65 70 75 80
Asp Glu Glu Ile Tyr Arg Ala Leu Thr Gly Arg Ala Leu Gln Pro Thr
85 90 95
Ile Asp Phe Gly Asp Arg Leu Thr Ala Leu Gly Lys Glu Ile Trp Ile
100 105 110
Arg Phe Val Val Val Pro Gly Tyr Thr Asp Ser Val Glu Asn Val Glu
115 120 125
Lys Val Ala Asp Ile Val Arg Arg Trp Arg Thr Ala Val Ser Arg
130 135 140

<210> 1667
<211> 370
<212> DNA
<213> Homo sapiens

<400> 1667
tccgctgaga ccagcgttgg tgacttccca ggtgagactg tccgcacccat ggccaagatc
60
gttgagtcta ctgaggccccg tggcttggac aagatcgcca agatcgactg ggatccgcac
120
accaccagtg gcatcatgtc gaaggcagct gctgagatcg ctgagcgcgc cgaggccaag
180
ttcatcgtgg cctttaccaa gtccggtgac accgcccgtc gtatcgctcg tctgcgtccg
240
agcaccgccg tcatcgtttt cacctctgat gagaccacga ccaagaccct cgcttgggtc
300
tggggcgctc acgcccgtcg taccgccgtg ttttaagaatg cggaggagct gtaccgctgg
360
gttaacgcgt
370

<210> 1668
<211> 123
<212> PRT
<213> Homo sapiens

<400> 1668

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Ser Ala Glu Thr Ser Val Gly Asp Phe Pro Gly Glu Thr Val Arg Thr
 1           5           10           15
Met Ala Lys Ile Val Glu Ser Thr Glu Ala Arg Gly Leu Asp Lys Ile
      20           25           30
Ala Lys Ile Asp Trp Asp Pro His Thr Thr Ser Gly Ile Met Ser Lys
      35           40           45
Ala Ala Ala Glu Ile Ala Glu Arg Ala Glu Ala Lys Phe Ile Val Ala
      50           55           60
Phe Thr Lys Ser Gly Asp Thr Ala Arg Arg Ile Ala Arg Leu Arg Pro
      65           70           75           80
Ser Thr Pro Leu Ile Val Phe Thr Ser Asp Glu Thr Thr Thr Lys Thr
      85           90           95
Leu Ala Trp Val Trp Gly Ala His Ala Val Val Thr Pro Val Phe Lys
      100          105          110
Asn Ala Glu Glu Leu Tyr Arg Trp Val Asn Ala
      115          120

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<210> 1669

<211> 1491

<212> DNA

<213> Homo sapiens

<400> 1669

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ggatcctgca gtggtgatct gtcatcgta cgtcacagaa ctgaacatgg aaatgaacaa
60
cgaaaaactcc acccccttct caaacgagtt attcctagct ccgccccag tccttgccctc
120
tcccagcctt ggtggttaatt agcttgaaag tgggaacgag agtgcggtcc gcaaagaaag
180
gacttctggt tagacactga aatacaaaaca gactgccaac gagctctggg caaagctgcc
240
ccgtcttctt ttttcgaaag accctcaaaa actgcctttc cttctgctac caaaacttgg
300
gccctagaaa gtggctgcgg agtggagcag atggacatca ctgagaatgg tagaggaggg
360
gctgtgtttt ctgaggggga gtcatggcag cttgtgctgg gggccaggaa gggaaaaaac
420
caatctggca ttcaggttgt ggaaggcaaa gtgaaacaag aagtcatttg ggaaaatatt
480
atattataaa cacatagaat aatatgtaca cgctcatata catcccaaag agaagcctca
540
aggagtccg tttcttctca aaagaaactt cactatgata aagcattcct atagtgggaa
600
ttaactacaa tgaaataatt taacaatttc atttatgcta tatctgtgtc cactacagag
660
tctacggtga aggctgtgtg gagcgagtgt gtctagtggg ctcgaacacc aacgcgttct
720
tcaaaaatag gcaatgacct gtttttttct attcacattt acaatagcta cacagtgatg
780
aaacgcagac tgaaaaatca aatggcagga cgatggaact gtcgtcaagg ttctcagact
840
tgtggcttct gcacctgtta tacttttggg tacgagtggg ctccacttag cttcgtaaag
900

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attagaaatt tccatgaaac acttaccac atataaatc tgtgtaaagc tttattttt
 960
 tccccaccta ctttaatttt ttttaaaaag tgaaataaga ggaaaaactc ttataaaata
 1020
 taagggttaa catacgagag agcgaggaac accccggagg ctgccggtgc gtgtggcttc
 1080
 atgtttctgt gctacatgag tctagtgtcc tcattctcca ttgtgacaac ctttctcccc
 1140
 ccatcacact gtcaatgagc tctaggcaaa gctgccccgt ttgcttttaa cctaagggat
 1200
 gctgtggttt ggttgactac atttgactac caccactgaa ggcgggcgac gtctgaagcg
 1260
 gctggatacc gcaacgatgg aaaatcaggc gaggtactag cgtggagggc cgggctgcca
 1320
 ggtcaaggtc gtctgggttc tcaggagcca gtctgtgcca cagaaccatc ggcagctgcc
 1380
 ttcgtaaggc acctcgtctt ggcattcgga aaaccacccc atcttgccag agtcccttgg
 1440
 tccttgggta gcaaaagccg tatgcatctt aaatcaagct ttcaatcatg a
 1491

<210> 1670
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1670
 Met Pro Asp Trp Phe Phe Pro Phe Leu Ala Pro Ser Thr Ser Cys His
 1 5 10 15
 Asp Ser Pro Ser Glu Asn Thr Ala Pro Pro Leu Pro Phe Ser Val Met
 20 25 30
 Ser Ile Cys Ser Thr Pro Gln Pro Leu Ser Arg Ala Gln Val Leu Val
 35 40 45
 Ala Glu Gly Lys Ala Val Phe Glu Gly Leu Ser Lys Lys Glu Asp Gly
 50 55 60
 Ala Ala Leu Pro Arg Ala Arg Trp Gln Ser Val Cys Ile Ser Val Ser
 65 70 75 80
 Asn Gln Lys Ser Phe Leu Cys Gly Pro His Ser Arg Ser His Phe Gln
 85 90 95
 Ala Asn Tyr His Gln Gly Trp Glu Arg Gln Gly Leu Gly Ala Glu Leu
 100 105 110
 Gly Ile Thr Arg Leu Arg Arg Gly Trp Ser Phe Arg Cys Ser Phe Pro
 115 120 125
 Cys Ser Val Leu
 130

<210> 1671
 <211> 432
 <212> DNA
 <213> Homo sapiens

<400> 1671
 gcgcgcggg gcgggaggac gccagtcgtc ttcccgcccc tcaccacgac acgaccatta
 60

tcgcgacgaa ggaagcccat ggctgaaacc acatcgccgg cacagcggaa acccacggcg
 120
 gcaccccgca tgaagccggt gtcgcgggtc ggggacacga ttttcgctgg cgcctcgtcg
 180
 gttattgcca tagccctggc cgtcatcgtc atcctgatgt tcgtcttctt catgaagacg
 240
 gcagccccga cgttggtggc taacaccgat aactttttca cgtcccgggc ttggacaacg
 300
 gatcagaacc cgcgggcctt tggatatccag gccctgctat ggacgacagt catctcatcc
 360
 ctgcttgccc tgcctcatcg agtgccgctc tcggtgggca tcgctctgtt tatcaccag
 420
 ctgcaccta gg
 432

<210> 1672

<211> 144

<212> PRT

<213> Homo sapiens

<400> 1672

Ala	Arg	Arg	Gly	Gly	Arg	Thr	Pro	Val	Val	Phe	Pro	Pro	Leu	Thr	Thr
1			5					10					15		
Thr	Arg	Pro	Leu	Ser	Arg	Arg	Arg	Lys	Pro	Met	Ala	Glu	Thr	Thr	Ser
		20						25					30		
Pro	Ala	Gln	Arg	Lys	Pro	Thr	Ala	Ala	Ser	Arg	Met	Lys	Pro	Val	Ser
		35					40					45			
Arg	Val	Gly	Asp	Thr	Ile	Phe	Ala	Gly	Ala	Ser	Ser	Val	Ile	Ala	Ile
	50					55					60				
Ala	Leu	Ala	Val	Ile	Val	Ile	Leu	Met	Phe	Val	Phe	Leu	Met	Lys	Thr
65					70					75				80	
Ala	Ala	Pro	Thr	Leu	Leu	Ala	Asn	Thr	Asp	Asn	Phe	Phe	Thr	Ser	Arg
			85						90					95	
Ala	Trp	Thr	Thr	Asp	Gln	Asn	Pro	Pro	Ala	Phe	Gly	Ile	Gln	Ala	Leu
		100						105					110		
Leu	Trp	Thr	Thr	Val	Ile	Ser	Ser	Leu	Leu	Ala	Leu	Leu	Ile	Ala	Val
		115					120					125			
Pro	Leu	Ser	Val	Gly	Ile	Ala	Leu	Phe	Ile	Thr	Gln	Leu	Ala	Pro	Arg
	130					135					140				

<210> 1673

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1673

tcgcgagcac actccagcct ctggggcgctc tgccagggcc tctgtgtttt gatatactct
 60
 gacctggcag tgaagctgct gatgaatgca cgacaaagac cagtttgctc cgtaacccca
 120
 ggctcccagc gtctttttcca tgagccaaag gcctggctct ggaggggggt gccctgcagc
 180
 tctgctggcc ttcttcagg ggagttcatt gctgggggtg gccctgcagg gacctccact
 240

gtgctgggga ggggaagaag aaggatgcaa cagggggagg ggagaatttg agaaaatagg
 300
 atgcaaattc tccacttggt aataaagaaa tagagagcca ttgctaagaa ctatgtttac
 360
 gcagggttag tgctgggacc cagaaccagt caactggttt t
 401

<210> 1674
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1674
 Met Ala Leu Tyr Phe Phe Ile His Lys Trp Arg Ile Cys Ile Leu Phe
 1 5 10 15
 Ser Gln Ile Leu Pro Ser Pro Cys Cys Ile Leu Leu Leu Pro Leu Pro
 20 25 30
 Ser Thr Val Glu Val Pro Ala Gly Pro Pro Pro Ala Met Asn Ser Pro
 35 40 45
 Gly Arg Arg Pro Ala Glu Leu Gln Gly Thr Pro Leu Gln Asp Gln Ala
 50 55 60
 Phe Gly Ser Trp Lys Arg Arg Trp Glu Pro Gly Val Thr Glu Gln Thr
 65 70 75 80
 Gly Leu Cys Arg Ala Phe Ile Ser Ser Phe Thr Ala Arg Ser Glu Tyr
 85 90 95
 Ile Lys Thr Gln Arg Pro Trp Gln Thr Pro Gln Arg Leu Glu Cys Ala
 100 105 110
 Arg

<210> 1675
 <211> 500
 <212> DNA
 <213> Homo sapiens

<400> 1675
 gccggcgac ccacctggga cgtggtgaaa tcggcaaaac tcacctttt agctacctgc
 60
 gcgccaaccg cacgggcagc ctccacacag ccctctagag cgctgctgga cagaatggct
 120
 tgattgtttg gcatgctctc aggatacccg tttagccagg aaacaccggg aggcttgcta
 180
 ctatgcgagc agccgacgca cgggtagagg gaattccac cacagtccct cgcactccac
 240
 ccgacacgc cctgggaacc gtcaccgcg gtaccaccgg gtcaatcggc tccgcaaagt
 300
 cgaccgctgg atgtgccacc acccgcnc a tccgcagtgc gctccgtaac gccgtctgca
 360
 acaccgtccc ctccgtatct gccgacacct gtgccaacac ttgtaccgat gcatgcaccg
 420
 atgcagcaac aggcgctccg ctgcgtatcg atctgggata cggcgccgcc ccctggacca
 480
 ctgttgagat ggctacgcgt
 500

<210> 1676
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 1676
 Arg Glu Phe Pro Pro Gln Ser Leu Ala Leu His Pro His Thr Pro Trp
 1 5 10 15
 Glu Pro Ser Pro Ala Val Pro Pro Gly Gln Ser Ala Pro Gln Met Arg
 20 25 30
 Pro Leu Asp Val Pro Pro Pro Arg Xaa Ser Ala Val Arg Ser Val Thr
 35 40 45
 Pro Ser Ala Thr Pro Ser Pro Pro Tyr Leu Pro Thr Pro Val Pro Thr
 50 55 60
 Leu Val Pro Met His Ala Pro Met Gln Gln Gln Ala Leu Arg Ser Leu
 65 70 75 80
 Ser Ile Trp Asp Thr Ala Pro Pro Pro Gly Pro Leu Leu Arg Trp Leu
 85 90 95
 Arg

<210> 1677
 <211> 631
 <212> DNA
 <213> Homo sapiens

<400> 1677
 nntcatgatt tcctcaatga tgccaagggtg atggaggccg gctatacctg ggtgcagggtg
 60
 gatttgcgcg gtacgggtgc ttctactggg tgtttgngac tggaatggtc cncggggag
 120
 cagcaggatg ttgtgaccgc cgtggaatgg gcggcggtac agccgtggtc gaatggtcgg
 180
 gtggggcttt tcggtaaate ctacgatggg gggacggggg cttattgctg caggtaatca
 240
 gccgcggggg ttggtgctg tgggtggcgca ggagccagct atggagccct acacttacct
 300
 gtataacaat gaggtccttt actacaacgc tattggtacg agcctttctt atgatgagat
 360
 tgctgcctcc cccggccgtg tccttcacga cactcccga tatatgaaga acagtgtcta
 420
 cgagggtggc caccgcatt gcctgtccga caatttgcgt aattcttttag accccatccg
 480
 tagccacaaa taatgggagg gatcgggtctt tccctcacca agacgcataa tttccccgt
 540
 gcccttgttt atttccgctg gccttattga ggacaatacg gagcctgatg gtttggtgga
 600
 attgttgaag gaccgtaagg ctccgacgct t
 631

<210> 1678
 <211> 78
 <212> PRT

<213> Homo sapiens

<400> 1678

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Xaa His Asp Phe Leu Asn Asp Ala Lys Val Met Glu Ala Gly Tyr Thr
 1           5           10           15
Trp Val Gln Val Asp Leu Arg Gly Thr Gly Ala Ser Thr Gly Cys Leu
          20           25           30
Xaa Leu Glu Trp Ser Xaa Gly Glu Gln Gln Asp Val Val Thr Ala Val
          35           40           45
Glu Trp Ala Ala Val Gln Pro Trp Ser Asn Gly Arg Val Gly Leu Phe
          50           55           60
Gly Lys Ser Tyr Asp Gly Gly Thr Gly Ser Tyr Cys Cys Arg
65           70           75

```

<210> 1679

<211> 531

<212> DNA

<213> Homo sapiens

<400> 1679

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nctacttaga gcaaaggtag gaaaagaagg cagctaggcg tggctctcat tccttccac
60
agaatggatt ataagtcgag cctgatccag gatgggaatc ccatggagaa cttggagaag
120
cagctgatct gccctatctg cctggagatg tttaccaagc cagtggatcat cttgccgtgc
180
cagcacaacc tgtgccgga ggtgtgccaat gacatcttcc aggctgcaaa tccctactgg
240
accagccggg gcagctcagt gtccatgtct ggaggccgtt tccgctgccc tacctgccgc
300
cacgaggtga tcatggatcg tcacggagtg tacggcctgc agaggaacct gctgggtggag
360
aacatcatcg acatctacaa acaggagtgc tccagtcggc cgctgcagaa gggcagtcac
420
cccattgaca aggagcacga agatgagaaa atcaacatct actgtctcac gtgtgaggtg
480
cccacctgct ccatgtgcaa ggtgtttggg atccacaagg cctgcgaggt g
531

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<210> 1680

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1680

```

Met Glu Asn Leu Glu Lys Gln Leu Ile Cys Pro Ile Cys Leu Glu Met
 1           5           10           15
Phe Thr Lys Pro Val Val Ile Leu Pro Cys Gln His Asn Leu Cys Arg
          20           25           30
Lys Cys Ala Asn Asp Ile Phe Gln Ala Ala Asn Pro Tyr Trp Thr Ser
          35           40           45
Arg Gly Ser Ser Val Ser Met Ser Gly Gly Arg Phe Arg Cys Pro Thr
          50           55           60
Cys Arg His Glu Val Ile Met Asp Arg His Gly Val Tyr Gly Leu Gln

```



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65          70          75          80
Arg Asn Leu Leu Val Glu Asn Ile Ile Asp Ile Tyr Lys Gln Glu Cys
          85          90          95
Ser Ser Arg Pro Leu Gln Lys Gly Ser His Pro Met Tyr Lys Glu His
          100          105          110
Glu Asp Glu Lys Ile Asn Ile Tyr Cys Leu Thr Cys Glu Val Pro Thr
          115          120          125
Cys Ser Met Cys Lys Val Phe Gly Ile His Lys Ala Cys Glu Val
          130          135          140

```

<210> 1681
 <211> 396
 <212> DNA
 <213> Homo sapiens

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<400> 1681
gagttccaca actgcaggac agatgacaag acgttccaat gtgagatgtg tttcagattc
60
ttttccacca acagcaacct ctccaagcac aagaagaagc acggcgacaa gaagtttgcc
120
tgtgaggtct gcagcaagat gttctaccgc aaggacgtca tgctggacca ccagcgccgg
180
cacnctggaa ggagtgcggc gagtgaagcg nnagaggacc tggaggccgg tggggagaac
240
ctggtcggtt acaagaagga gccttcgagg tgcccgggtgt gtggcaaggt gttctcctgc
300
cggagcaata tgaacaagca cctgctcacc cacggcgaca agaagtacac ctgcgagatc
360
tgcgggcgca agttcttcgg cgtggatgtg ctcagg
396

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<210> 1682
 <211> 132
 <212> PRT
 <213> Homo sapiens

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<400> 1682
Glu Phe His Asn Cys Arg Thr Asp Asp Lys Thr Phe Gln Cys Glu Met
1          5          10          15
Cys Phe Arg Phe Phe Ser Thr Asn Ser Asn Leu Ser Lys His Lys Lys
          20          25          30
Lys His Gly Asp Lys Lys Phe Ala Cys Glu Val Cys Ser Lys Met Phe
          35          40          45
Tyr Arg Lys Asp Val Met Leu Asp His Gln Arg Arg His Xaa Gly Arg
          50          55          60
Ser Ala Ala Ser Glu Ala Xaa Glu Asp Leu Glu Ala Gly Gly Glu Asn
65          70          75          80
Leu Val Arg Tyr Lys Lys Glu Pro Ser Gly Cys Pro Val Cys Gly Lys
          85          90          95
Val Phe Ser Cys Arg Ser Asn Met Asn Lys His Leu Leu Thr His Gly
          100          105          110
Asp Lys Lys Tyr Thr Cys Glu Ile Cys Gly Arg Lys Phe Phe Arg Val
          115          120          125
Asp Val Leu Arg

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130

<210> 1683
 <211> 676
 <212> DNA
 <213> Homo sapiens

<400> 1683
 nncggccgga caggtcccgga gcagccccgc ccaacatgga cccagacccc caggcgggcg
 60
 tgcaggtggg catgcgggtg gtgcgcgggc tggaccggaa gtggggccag caggacggcg
 120
 gcgagggcgg cgtgggcacg gtggtggagc ttggccgcca cggcagcccc tcgacacccg
 180
 accgcacagt ggtcgtgcag tgggaccagg gcacgcgcac caactaccgc gccggctacc
 240
 agggcgcgca cgacctgctg ctgtacgaca acgcccagat cggcgtcccg caccccaaca
 300
 tcatctgtga ctgctgcaag aagcacgggc tgcgggggat gcgctggaag tgccgtgtgt
 360
 gcctggacta cgacctctgc acgcagtgtc acatgcacaa caagcatgag ctgcgccacg
 420
 ccttcgaccg ctacgagacc gctcactcgc gccctgtcac actgagtccc cgccagggcc
 480
 tcccaggat cccactaagg ggcattctcc agggagcgaa ggtggtgcga ggccccgact
 540
 gggagtgggg ctcacaggat ggtgagtgga ggcagagggg cggggtcagg gctgggctgt
 600
 ggctggctca tggctcagcc ttagcctgct gggggggcct ctttccccag gaggggaagg
 660
 aaaccgggcc gccgga
 676

<210> 1684
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 1684
 Xaa Gly Arg Thr Gly Pro Glu Gln Pro Arg Pro Thr Trp Thr Gln Thr
 1 5 10 15
 Pro Arg Arg Ala Cys Arg Trp Ala Cys Gly Trp Cys Ala Ala Trp Thr
 20 25 30
 Gly Ser Gly Ala Ser Arg Thr Ala Ala Arg Ala Ala Trp Ala Arg Trp
 35 40 45
 Trp Ser Leu Ala Ala Thr Ala Ala Pro Arg His Pro Thr Ala Gln Trp
 50 55 60
 Ser Cys Ser Gly Thr Arg Ala Arg Ala Pro Thr Thr Ala Pro Ala Thr
 65 70 75 80
 Arg Ala Arg Thr Thr Cys Cys Cys Thr Thr Thr Pro Arg Ser Ala Ser
 85 90 95
 Gly Thr Pro Thr Ser Ser Val Thr Ala Ala Arg Ser Thr Gly Cys Gly
 100 105 110
 Gly Cys Ala Gly Ser Ala Val Cys Ala Trp Thr Thr Thr Ser Ala Arg

```

          115                120                125
Ser Ala Thr Cys Thr Thr Ser Met Ser Ser Pro Thr Pro Ser Thr Ala
      130                135                140
Thr Arg Pro Leu Thr Arg Ala Leu Ser His
145                150

<210> 1685
<211> 2740
<212> DNA
<213> Homo sapiens

<400> 1685
ngaggaggag cggcgggcgg ctccggggaa agggaggggg gcgctccgca gccgccgccg
60
cccaggggct ggcgagggaa aggcgtacgc gctcagcaga ggggcggcag cggcggggag
120
ggggcctccc cttctccatc ctctctttct gcggggcaaaa ccccaggaac cggcagcaga
180
aactccggaa gcggcgttgc ggggggcggc agcgggtggtg gagggagcta ctggaaagaa
240
ggatgtctgc agtctgagct catccagttc catctcaaga aggagcgggc ggcagcggcg
300
gcggcccgcg ctcagatgca cgctaagaac ggcggcgcca gcagtagccg cagctccccg
360
gtgtctggcc cccctgccgt ttgcgagacc ctggccgtcg cctccgcctc cccaatggcg
420
gcggcgggcg agggcccccga gcagagcgca gagggcagcg cgagcggcgg gggcatgcag
480
gcggcagcgc ccccttcgtc gcagccgcac ccgcagcagc tccaagagca ggaagaaatg
540
caagaggaga tggagaagct gcgagaggaa aacgagactc tcaagaacga gatcgatgag
600
ctgagaaccg agatggacga gatgagggac actttcttcg aggaggatgc ctgtcaactg
660
caggaaatgc gccacgagtt ggagagagcc aacaaaaact gccggtacct gcagtaccgc
720
ctccgcaaag ccgagcgcaa aaggctccgc tacgccaga cgggggaaat cgacggggag
780
ctgttcgcga gcctggagca ggacctcaag gttgcaaagg atgtatctgt gagacttcac
840
catgaattag aaaatgtgga agaaaagaga acaacaacag aagatgaaaa tgagaaactg
900
aggcaacagc tcatagaagt tgaaattgca aagcaagctt tacagaatga actggaaaaa
960
atgaaagagt tatccttaaa aagaagagga agcaaagatt tgccaaaatc tgaaaaaaag
1020
gctcaacaga ctcccacaga ggaggacaat gaagatctga agtgccagct gcagtttgtt
1080
aaggaagaag ccgctttgat gagaaagaaa atggccaaga ttgataaaga aaaggacaga
1140
tttgaacacg agctccagaa gtacagatcc ttttatgggg atctggacag tcctttgccc
1200
aaaggagaag ccggaggccc tcccagcact agggaggccg agctcaagct acggctaagg
1260

```

ctggtggagg aagaagccaa catcctgggc aggaaaatcg tcgaactgga ggtggagaac
1320
agaggcctga aggcggaact ggacgacctt agggcgcatg acnnttcaac ggctcggcca
1380
accgctcat gaggnagca gagcgaatcc ctgtcggagc tgcggcagca cctgcagctg
1440
gtggaagacg agacggagct gctgcggagg aacgtggccg acctggagga gcagaacaag
1500
cgcatcacgg cggagctcaa caagtacaag tacaagnntc cggcggccac gacagcgcgc
1560
ggcaccacga caacgccana gaccgaggcc ctgcaggagg agctgaaggc ggcgcgctg
1620
cagatcaacg agctcagcgg caaggtcatg cagctgcagt acgagaaccg cgtgcttatg
1680
tccaacatgc agcgctacga cctggcctcg cacctgggca tccgcggcag ccccgcgac
1740
agcgacgccg agagcgacgc gggcaagaag gagagcgacg acgactcgcg gcctccgcac
1800
cgcaagcgcg aaggggccat cggcggcgag agcgactcgg aggaggtggn cgcaacatcc
1860
gctgcctcan cgeccactcg ctcttcttac ccggcgcccg ggccctggcc caagagcttc
1920
tccgatcggc agcagatgaa ggacatccgc tcggaggccg agcgccctggg caagaccatc
1980
gaccggctca tcgccgacac gagcaccatc atcaccgagg cgcgcatcnt acgtggccaa
2040
cggggacctg ttnnccgact catggacgag gaggacgacg gcagccgcat ccgggagcac
2100
gagctgctct accgcatcaa cgctcagatg aaggccttcc gcaaggagct gcagaccttc
2160
atcgaccgcc tcgaggtgcc caagtctgcy gacgaccgcg gcgccgagga gcccatttcc
2220
gtgagtcaga tggtccagcc tatcatttta cttatttca ttcttgatt attttcatca
2280
ctttcttaca caacaatatt taaacttgtc ttcttttta cactgttttt tgtactgtaa
2340
atctttcatc atttaccatt cattgtagta ttttcagttt gtttattttg ttcaccttc
2400
aagacaagaa gtaaaagaag tataatttct gtagtaacca atgctataaa aacactgaag
2460
actgcttatt tctttacaaa gatacaactc atcttacaa gaccaaattc aataagaagc
2520
ccaaacacta aaatatttca ggtaagaaag tgtgacattt ttctgtatga attgttttaa
2580
tttttacttc ttttttcat cctgtttgtc tcctcttgat aaataattgg catactgaat
2640
ataaaaaatgg actacatgtc tcataattat ttctcagtag ttcactatta ttattcaaaa
2700
gctggacgga cattcacaat ttggtcacat ttccaaaaag
2740

<210> 1686

<211> 463

<212> PRT .

<213> Homo sapiens

<400> 1686

Xaa Gly Gly Ala Gly Gly Gly Ser Gly Glu Arg Glu Gly Gly Ala Pro
 1 5 10 15
 Gln Pro Pro Pro Pro Arg Gly Trp Arg Gly Lys Gly Val Arg Ala Gln
 20 25 30
 Gln Arg Gly Gly Ser Gly Gly Glu Gly Ala Ser Pro Ser Pro Ser Ser
 35 40 45
 Ser Ser Ala Gly Lys Thr Pro Gly Thr Gly Ser Arg Asn Ser Gly Ser
 50 55 60
 Gly Val Ala Gly Gly Gly Ser Gly Gly Gly Gly Ser Tyr Trp Lys Glu
 65 70 75 80
 Gly Cys Leu Gln Ser Glu Leu Ile Gln Phe His Leu Lys Lys Glu Arg
 85 90 95
 Ala Ala Ala Ala Ala Ala Ala Ala Gln Met His Ala Lys Asn Gly Gly
 100 105 110
 Gly Ser Ser Ser Arg Ser Ser Pro Val Ser Gly Pro Pro Ala Val Cys
 115 120 125
 Glu Thr Leu Ala Val Ala Ser Ala Ser Pro Met Ala Ala Ala Ala Glu
 130 135 140
 Gly Pro Gln Gln Ser Ala Glu Gly Ser Ala Ser Gly Gly Gly Met Gln
 145 150 155 160
 Ala Ala Ala Pro Pro Ser Ser Gln Pro His Pro Gln Gln Leu Gln Glu
 165 170 175
 Gln Glu Glu Met Gln Glu Glu Met Glu Lys Leu Arg Glu Glu Asn Glu
 180 185 190
 Thr Leu Lys Asn Glu Ile Asp Glu Leu Arg Thr Glu Met Asp Glu Met
 195 200 205
 Arg Asp Thr Phe Phe Glu Glu Asp Ala Cys Gln Leu Gln Glu Met Arg
 210 215 220
 His Glu Leu Glu Arg Ala Asn Lys Asn Cys Arg Ile Leu Gln Tyr Arg
 225 230 235 240
 Leu Arg Lys Ala Glu Arg Lys Arg Leu Arg Tyr Ala Gln Thr Gly Glu
 245 250 255
 Ile Asp Gly Glu Leu Leu Arg Ser Leu Glu Gln Asp Leu Lys Val Ala
 260 265 270
 Lys Asp Val Ser Val Arg Leu His His Glu Leu Glu Asn Val Glu Glu
 275 280 285
 Lys Arg Thr Thr Thr Glu Asp Glu Asn Glu Lys Leu Arg Gln Gln Leu
 290 295 300
 Ile Glu Val Glu Ile Ala Lys Gln Ala Leu Gln Asn Glu Leu Glu Lys
 305 310 315 320
 Met Lys Glu Leu Ser Leu Lys Arg Arg Gly Ser Lys Asp Leu Pro Lys
 325 330 335
 Ser Glu Lys Lys Ala Gln Gln Thr Pro Thr Glu Glu Asp Asn Glu Asp
 340 345 350
 Leu Lys Cys Gln Leu Gln Phe Val Lys Glu Glu Ala Ala Leu Met Arg
 355 360 365
 Lys Lys Met Ala Lys Ile Asp Lys Glu Lys Asp Arg Phe Glu His Glu
 370 375 380
 Leu Gln Lys Tyr Arg Ser Phe Tyr Gly Asp Leu Asp Ser Pro Leu Pro
 385 390 395 400
 Lys Gly Glu Ala Gly Gly Pro Pro Ser Thr Arg Glu Ala Glu Leu Lys

```

                405                410                415
Leu Arg Leu Arg Leu Val Glu Glu Glu Ala Asn Ile Leu Gly Arg Lys
                420                425                430
Ile Val Glu Leu Glu Val Glu Asn Arg Gly Leu Lys Ala Glu Leu Asp
                435                440                445
Asp Leu Arg Gly Asp Asp Xaa Ser Thr Ala Arg Pro Thr Arg Ser
                450                455                460

```

<210> 1687
 <211> 326
 <212> DNA
 <213> Homo sapiens

```

<400> 1687
gtgcacacag gtgagcgtcc ctacaagtgt ccacactgcg actatgcagg taccagtcg
60
ggctcgctca agtatcacct tcagcgtcac caccgagagc agaagaacag tgcgggttcc
120
tgggcctccc ccagaacccc cgccaccttc ccagcggggc tcactgcagc cgcagtcagg
180
agccaagcca actcaggcct cagccacctg ggtagagggc actgcaagta cccggcctcc
240
ttcgagcagc accggaccag ggtcccgtag gaagcctgct agccctggga ggacctgcg
300
aaacggcgat gtggtgaagc cgaact
326

```

<210> 1688
 <211> 89
 <212> PRT
 <213> Homo sapiens

```

<400> 1688
Val His Thr Gly Glu Arg Pro Tyr Lys Cys Pro His Cys Asp Tyr Ala
1          5          10          15
Gly Thr Gln Ser Gly Ser Leu Lys Tyr His Leu Gln Arg His His Arg
20          25          30
Glu Gln Lys Asn Ser Ala Gly Ser Trp Ala Ser Pro Arg Thr Pro Ala
35          40          45
Thr Phe Pro Ala Gly Leu Thr Ala Ala Ala Val Arg Ser Gln Ala Asn
50          55          60
Ser Gly Leu Ser His Leu Gly Arg Gly His Cys Lys Tyr Pro Ala Ser
65          70          75          80
Phe Glu Gln His Arg Thr Arg Val Pro
85

```

<210> 1689
 <211> 301
 <212> DNA
 <213> Homo sapiens

```

<400> 1689
nggggaagcc atggctgctt aaggacaatg cactgtcagc tcggtgatgt cttgatttgg
60

```

tctgggattc tgcacttagt aattgcagat aatactcatg tggcgccaag gaaaaaaaaa
 120
 ttggcctttt cccagttccat taagcctaaa caaaccacat cactttacat caggcagatc
 180
 atgtggtacc agaattttcc agtttggcgg actatcttga tcaaataaac taaattattg
 240
 ccactgtggc tatctgtgaa agaacacaat gaagaaaatc tggagcetta tctcatactc
 300
 a
 301

<210> 1690

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1690

Met	His	Cys	Gln	Leu	Gly	Asp	Val	Leu	Ile	Trp	Ser	Gly	Ile	Leu	His
1			5					10					15		
Leu	Val	Ile	Ala	Asp	Asn	Thr	His	Val	Ala	Pro	Arg	Lys	Lys	Lys	Leu
			20					25					30		
Ala	Phe	Ser	Gln	Ser	Ile	Lys	Pro	Lys	Gln	Thr	Thr	Ser	Leu	Tyr	Ile
			35					40					45		
Arg	Gln	Ile	Met	Trp	Tyr	Gln	Asn	Phe	Pro	Val	Trp	Arg	Thr	Ile	Leu
			50				55					60			
Ile	Lys	Ser	Thr	Lys	Leu	Leu	Pro	Leu	Trp	Leu	Ser	Val	Lys	Glu	His
65				70						75				80	
Asn	Glu	Glu	Asn	Leu	Glu	Pro	Tyr	Leu	Ile	Leu					
			85							90					

<210> 1691

<211> 483

<212> DNA

<213> Homo sapiens

<400> 1691

nacgcgttcc ggtatgccga tgggcccgtg ctgctgggcg tccgccggcg gcgcggtgag
 60
 ttgtgccttg aagtgtggga ccgcggcccc ggcattcctc aagacaaaaca aaagtcattc
 120
 ttgaagaat tcaaacgcct ggacagtcac cagaccgcg cagagaaaagg cctgggcctg
 180
 ggcctggcga ttgccgacgg cttgtgccgc gtgctcgggc atcgcttgag cgtgcgttcg
 240
 tggccgggca agggcagcgt gtccagcgtg cgcgtgccgt tggcgcgcac ccaggtcagc
 300
 gcgcctgccca agccggcgca ggaaagcggc cagccgttga gtggcgcgca ggtgctgtgt
 360
 gtgaataaca aagaaagcat cctgatcggc atgcgcagct tgctccccgc ctggggctgc
 420
 gaagtctggc ccgcgcgcga ccaggcgcaa tgtgccgcgc tgttggtgta ggggtgtgcgg
 480
 ccg
 483

<210> 1692
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 1692
 Xaa Ala Phe Arg Tyr Ala Asp Gly Pro Val Leu Leu Gly Val Arg Arg
 1 5 10 15
 Arg Arg Gly Glu Leu Cys Leu Glu Val Trp Asp Arg Gly Pro Gly Ile
 20 25 30
 Pro Gln Asp Lys Gln Lys Ser Phe Phe Glu Glu Phe Lys Arg Leu Asp
 35 40 45
 Ser His Gln Thr Arg Ala Glu Lys Gly Leu Gly Leu Gly Leu Ala Ile
 50 55 60
 Ala Asp Gly Leu Cys Arg Val Leu Gly His Arg Leu Ser Val Arg Ser
 65 70 75 80
 Trp Pro Gly Lys Gly Ser Val Phe Ser Val Arg Val Pro Leu Ala Arg
 85 90 95
 Thr Gln Val Ser Ala Pro Ala Lys Pro Ala Gln Glu Ser Gly Gln Pro
 100 105 110
 Leu Ser Gly Ala Gln Val Leu Cys Val Asn Asn Lys Glu Ser Ile Leu
 115 120 125
 Ile Gly Met Arg Ser Leu Leu Pro Arg Trp Gly Cys Glu Val Trp Pro
 130 135 140
 Ala Arg Asp Gln Ala Gln Cys Ala Ala Leu Leu Ala Glu Gly Val Arg
 145 150 155 160
 Pro

<210> 1693
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 1693
 acgcgtgttc catctgcagc cgtgcgaaaa ctctcccacc atgtcgcaga ctggatactt
 60
 cgaggattca agctactaca agtgtgacac agatgacacc ttcgaagccc gagaggagat
 120
 actggggggg atgaggcctt cgacactgcc aactcctcca tcgtgtctgg cgagagtatc
 180
 cgtttttttg tcaatgtcaa ccttgagatg caggccacca aactgagaa tgaagcgact
 240
 tccgggtggct gtgtgctcct gcacacctcc cgaaaggcca gcatcgtcct gaacgagacg
 300
 gccacctccc tggataacgt gctgcggacc atg
 333

<210> 1694
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1694

```

Met Val Arg Ser Thr Leu Ser Arg Glu Val Ala Val Ser Phe Arg Thr
 1             5             10             15
Met Leu Ala Phe Arg Glu Val Cys Arg Ser Thr Gln Pro Pro Glu Val
          20             25             30
Ala Ser Phe Ser Val Leu Val Ala Cys Ile Ser Arg Leu Thr Leu Thr
          35             40             45
Lys Lys Arg Ile Leu Ser Pro Asp Thr Met Glu Glu Leu Ala Val Ser
          50             55             60
Lys Ala Ser Ser Pro Pro Val Ser Pro Leu Gly Leu Arg Arg Cys His
65             70             75             80
Leu Cys His Thr Cys Ser Ser Leu Asn Pro Arg Ser Ile Gln Ser Ala
          85             90             95
Thr Trp Trp Glu Ser Phe Arg Thr Ala Ala Asp Gly Thr Arg
          100             105             110

```

<210> 1695

<211> 485

<212> DNA

<213> Homo sapiens

<400> 1695

```

tgatcagctt tatcaggagt ttttgcaagt accgcagatt tatgttgaat cctagtaagc
60
gccaggaatt tgaagactat cttcaccagg aaatgcaaaa tagcaaggaa aatttcacca
120
cagcacacaa cacatcgga cgttcagctc caccctccac aaatgtccgg agtgcagacc
180
aagagaatgg agaaataacc cttgtaaagc gtcgtatatt tggccacagg attatcactg
240
tcaactttgc gatcaatgat ctatatctt tttctgaaat ggagaaattt aatgatctgg
300
tcagttcagc ccacatgctg caggtcaacc gggcatataa tgagaatgat gtgaccta
360
tgcggtccaa aatgaacatt atccaaaaac ttttctgaa ttctgacatc cctccaaagc
420
tgagggtgaa tgtccctgag ttccagaagg atgccatcct tgctgccatc acagagggct
480
accta
485

```

<210> 1696

<211> 148

<212> PRT

<213> Homo sapiens

<400> 1696

```

Met Leu Asn Pro Ser Lys Arg Gln Glu Phe Glu Asp Tyr Leu His Gln
 1             5             10             15
Glu Met Gln Asn Ser Lys Glu Asn Phe Thr Thr Ala His Asn Thr Ser
          20             25             30
Gly Arg Ser Ala Pro Pro Ser Thr Asn Val Arg Ser Ala Asp Gln Glu
          35             40             45
Asn Gly Glu Ile Thr Leu Val Lys Arg Arg Ile Phe Gly His Arg Ile

```

```

      50              55              60
Ile Thr Val Asn Phe Ala Ile Asn Asp Leu Tyr Phe Phe Ser Glu Met
65              70              75              80
Glu Lys Phe Asn Asp Leu Val Ser Ser Ala His Met Leu Gln Val Asn
      85              90              95
Arg Ala Tyr Asn Glu Asn Asp Val Ile Leu Met Arg Ser Lys Met Asn
      100             105             110
Ile Ile Gln Lys Leu Phe Leu Asn Ser Asp Ile Pro Pro Lys Leu Arg
      115             120             125
Val Asn Val Pro Glu Phe Gln Lys Asp Ala Ile Leu Ala Ala Ile Thr
      130             135             140
Glu Gly Tyr Leu
145

```

<210> 1697
 <211> 337
 <212> DNA
 <213> Homo sapiens

```

<400> 1697
accaggttcc caccatcctc aggggaatca cagggttactg gctttggaga ccgagatgtc
60
ttcccgcctc ccaggggcct gtggatggga ctccctgcga attcgactcc caggggaaaa
120
gccaaagagct gcctccttgg gacaactggg gcggcagctg tgatcgacac tggcttcagc
180
agaggcctga gcggctgcct ccgttggcca gcaggctctg agagcactcg cccggcctga
240
ctgttcatcc atcctttcac ccggaggcca gctgtggctg tctgtgctct cagaggggag
300
gcgatgggca aggcgcctgc catgcagatg ggtgggtg
337

```

<210> 1698
 <211> 107
 <212> PRT
 <213> Homo sapiens

```

<400> 1698
Met Ala Gly Ala Leu Pro Ile Ala Ser Pro Leu Arg Ala Gln Thr Ala
1      5      10      15
Thr Ala Gly Leu Arg Val Lys Gly Trp Met Asn Ser Gln Ala Gly Arg
      20      25      30
Val Leu Ser Glu Pro Ala Gly Gln Arg Arg Gln Pro Leu Arg Pro Leu
      35      40      45
Leu Lys Pro Cys Ala Ile Thr Ala Ala Ala Pro Val Val Pro Arg Arg
      50      55      60
Gln Leu Leu Ala Phe Pro Leu Gly Val Glu Phe Ala Gly Ser Pro Ile
65      70      75      80
His Arg Pro Leu Gly Gly Gly Lys Thr Ser Arg Ser Pro Lys Pro Val
      85      90      95
Thr Cys Asp Ser Pro Glu Asp Gly Gly Asn Leu
      100      105

```

<210> 1699
 <211> 442
 <212> DNA
 <213> Homo sapiens

<400> 1699
 nacgcgttcc ttaaggatca tcctgaggtt ctgtacgtag accttctaata tgcggatatg
 60
 aatgggtgtgg tgcgcggcaa gcgcatcgaa cgcaccagcc tccacaaggt ttacgagaag
 120
 ggcattaacc tgcctgcctc tctatttgcc ctggatatca atgggtcaac ggtggaaagc
 180
 accggcctgg gtctggacat cggatgatgct gaccgaatct gttatccaat ccccgacacc
 240
 ctgtgcaatg aaccttgcca aaagcgccca accgcgcaac tgctgatgac catgcacgaa
 300
 cttgaagggg aacctttttt cgccgatcct cgcgaagtac tccgccaagt tgtaagcaaa
 360
 tttgacgacc tcgggtctgac catctgcgcc gcattcgagc tggagttcta cctgattgac
 420
 caggagaacg tgaatggccg gc
 442

<210> 1700
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 1700
 Xaa Ala Phe Leu Lys Asp His Pro Glu Val Leu Tyr Val Asp Leu Leu
 1 5 10 15
 Ile Ala Asp Met Asn Gly Val Val Arg Gly Lys Arg Ile Glu Arg Thr
 20 25 30
 Ser Leu His Lys Val Tyr Glu Lys Gly Ile Asn Leu Pro Ala Ser Leu
 35 40 45
 Phe Ala Leu Asp Ile Asn Gly Ser Thr Val Glu Ser Thr Gly Leu Gly
 50 55 60
 Leu Asp Ile Gly Asp Ala Asp Arg Ile Cys Tyr Pro Ile Pro Asp Thr
 65 70 75 80
 Leu Cys Asn Glu Pro Trp Gln Lys Arg Pro Thr Ala Gln Leu Leu Met
 85 90 95
 Thr Met His Glu Leu Glu Gly Glu Pro Phe Phe Ala Asp Pro Arg Glu
 100 105 110
 Val Leu Arg Gln Val Val Ser Lys Phe Asp Asp Leu Gly Leu Thr Ile
 115 120 125
 Cys Ala Ala Phe Glu Leu Glu Phe Tyr Leu Ile Asp Gln Glu Asn Val
 130 135 140
 Asn Gly Arg
 145

<210> 1701
 <211> 8265
 <212> DNA
 <213> Homo sapiens

<400> 1701
nacgcgtgaa gggagggcga ggccggagcc cgagggcgac ccgagaagcg gcggggcggc
60
gggccggcgg gcggggcgca gagccaggca gcgcaggat agccaggctg gagaaaagaa
120
gctgccacca tggttgcact ttactgaag atcagcattg ggaatgtggt gaagacgatg
180
cagtttgagc cgtctaccat ggtgtacgac gcctgccgca tcattcgtga gcggatccca
240
gagcccccag ctggctcctc cagcgacttt gggctctttc tgtcagatga tgaccccaaa
300
aagggtatat ggctggaggc tgggaaagct ttggactact acatgctccg aaatggggac
360
actatggagt acaggaagaa acagagaccc ctgaagatcc gtatgctgga tggaaactgtg
420
aagacgatca tggtaggatga ctctaagact gtcactgaca tgctcatgac catctgtgcc
480
cgcattggca tcaccaatca tgatgaatat tcattgggtc gagagctgat ggaagaaaag
540
aaagaggaag gaacgggcac actcaaaaag gacaagacat tgctgcgaga tgaaaagaag
600
atggagaaac taaagcagaa attgcacaca gatgatgagt tgaactggct ggaccatggt
660
cggacactga gggagcaggg tgtagaggag cacgagacgc tgctgctgcg gaggaagtcc
720
ttttactcag accagaatgt ggattcccgg gacctgtac agctgaacct cctgtatgtg
780
caggcacgag atgacatcct gaatggctcc cacctgtct cctttgacaa ggcctgtgag
840
tttgctggct tccaatgcca gatccagttt gggccccaca atgagcagaa gcacaaggct
900
ggcttccttg acctgaagga ctctctgccc aaggagtatg tgaagcagaa gggagagcgt
960
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 Glu Ser Leu Asn Phe Glu Glu Gln Ile Leu Glu Ala Ala Lys Ser Ile
 2340 2345 2350
 Ala Ala Ala Thr Ser Ala Leu Val Lys Ala Ala Ser Ala Ala Gln Arg
 2355 2360 2365
 Glu Leu Val Ala Gln Gly Lys Val Gly Ala Ile Pro Ala Asn Ala Leu
 2370 2375 2380
 Asp Asp Gly Gln Trp Ser Gln Gly Leu Ile Ser Ala Ala Arg Met Val
 2385 2390 2395 2400
 Ala Ala Ala Thr Asn Asn Leu Cys Glu Ala Ala Asn Ala Ala Val Gln
 2405 2410 2415
 Gly His Ala Ser Gln Glu Lys Leu Ile Ser Ser Ala Lys Gln Val Ala
 2420 2425 2430
 Ala Ser Thr Ala Gln Leu Leu Val Ala Cys Lys Val Lys Ala Asp Gln
 2435 2440 2445
 Asp Ser Glu Ala Met Lys Arg Leu Gln Ala Ala Gly Asn Ala Val Lys
 2450 2455 2460
 Arg Ala Ser Asp Asn Leu Val Lys Ala Ala Gln Lys Ala Ala Phe

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<210> 1705
<211> 377
<212> DNA
<213> Homo sapiens
```

<400> 1705
 gtgcaccttt tctcaggact cgtcagaag gtccttctgg gaggacaatg gacaagacta
 60
 aaccatcaaa tccattctca atgggtcaaa ttccaaatth tctgaaggg ctggttctta
 120
 ctggtgctcc aatcgagttg cagaaaggta tacaggggtg agcaagttha ttaaatcctg
 180
 gttttggctg gaacaaaaat ccacaagttc aaaccttgaa gaattctcaa ggttctatth
 240
 ataatttagt gaggtctgga gttactgttg aaaggaaagt taatgtaggg gcacaaggag
 300
 cttttaactc tgccccctga ccacagatgg aatttccac agttcctcca tacaacctct
 360
 cttccttcgg agctagc
 377

<210> 1706
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1706
 Met Asp Lys Thr Lys Pro Ser Asn Pro Phe Ser Met Gly Gln Ile Pro
 1 5 10 15
 Asn Phe Pro Glu Gly Leu Ala Ser Thr Gly Ala Pro Ile Glu Leu Gln
 20 25 30
 Lys Gly Ile Gln Gly Gly Ala Ser Leu Phe Asn Pro Gly Phe Gly Trp
 35 40 45
 Asn Gln Asn Pro Gln Val Gln Thr Leu Lys Asn Ser Gln Gly Ser Ile
 50 55 60
 His Asn Leu Val Arg Ser Gly Val Thr Val Glu Arg Lys Val Asn Val
 65 70 75 80
 Gly Ala Gln Gly Ala Phe Asn Ser Ala Pro Ala Pro Gln Met Glu Phe
 85 90 95
 Pro Thr Val Pro Pro Tyr Asn Pro Ser Ser Phe Gly Ala Ser
 100 105 110

<210> 1707
 <211> 427
 <212> DNA
 <213> Homo sapiens

<400> 1707
 nnttcggtga acccgaagcc cggacgcagc gccgataccc atgtgcgccc agtactacgc
 60
 catcacgcca agcgagtgt catcatcggg gccgggctag ccggcatgga ggctgcgcga
 120
 gttctcagcg aacgcgcaca cgaacctctc atcgtcgagg ccagcgacca cattggcgga
 180
 gtcattccttg cgggtgggtca accttccttc aaggaggacg acctagctct gctggagtgg
 240
 taccgcacca ccctggagga gttgggcgtg gagattcgac tcaacaccac cgtaacggct
 300

gatcttattcg ctctcttcgg ggccgatcac gtcgtcctgg cgaccggatc gaggcgcgt
 360
 cgactcgacc taggtgatga tgccaaggtc attgacgcca ccgacgctct gctcaaccgc
 420
 gacgcgt
 427

<210> 1708
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 1708
 Xaa Ser Val Asn Pro Lys Pro Gly Arg Ser Ala Asp Thr His Val Arg
 1 5 10 15
 Pro Val Leu Arg His His Ala Lys Arg Val Leu Ile Ile Gly Ala Gly
 20 25 30
 Leu Ala Gly Met Glu Ala Ala Arg Val Leu Ser Glu Arg Ala His Glu
 35 40 45
 Pro Leu Ile Val Glu Ala Ser Asp His Ile Gly Gly Val Ile Leu Ala
 50 55 60
 Gly Gly Gln Pro Ser Phe Lys Glu Asp Asp Leu Ala Leu Leu Glu Trp
 65 70 75 80
 Tyr Arg Thr Thr Leu Glu Glu Leu Gly Val Glu Ile Arg Leu Asn Thr
 85 90 95
 Thr Val Thr Ala Asp Leu Ile Ala Ser Phe Gly Ala Asp His Val Val
 100 105 110
 Leu Ala Thr Gly Ser Arg Pro Arg Arg Leu Asp Leu Gly Asp Asp Ala
 115 120 125
 Lys Val Ile Asp Ala Thr Asp Ala Leu Leu Asn Arg Asp Ala
 130 135 140

<210> 1709
 <211> 446
 <212> DNA
 <213> Homo sapiens

<400> 1709
 acgcgtgaag gggaccagga ggttgacac agaccattgc aatggaaatg atgatttaga
 60
 ctgttctttt ctgactgatg actgggagtc agggaagatg aatgcagagt ctgtgatcac
 120
 ctctcttccc agccacatca tatctcagcc tcttgaggga aactcccata gcttgtctct
 180
 tcagtcaccag ttgacagctt ctgaacgttt ccaagagaat agttcggatc attcagaaac
 240
 caggttggtg caagaggtct tctttcaggc aatcctgctt gctgtgtgct taatcatttc
 300
 tgcattgtgca agatgggtta tgggagaaat attagccagt gtcttcacat gctcattgat
 360
 gataactgta gcttatgtga aatcattggt tctcagcctt gccagctatt tcaaaaccac
 420
 tgcctgtgct cggtttgtca aaattt
 446

<210> 1710
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 1710
 Met Asn Ala Glu Ser Val Ile Thr Ser Ser Ser Ser His Ile Ile Ser
 1 5 10 15
 Gln Pro Pro Gly Gly Asn Ser His Ser Leu Ser Leu Gln Ser Gln Leu
 20 25 30
 Thr Ala Ser Glu Arg Phe Gln Glu Asn Ser Ser Asp His Ser Glu Thr
 35 40 45
 Arg Leu Leu Gln Glu Val Phe Phe Gln Ala Ile Leu Leu Ala Val Cys
 50 55 60
 Leu Ile Ile Ser Ala Cys Ala Arg Trp Val Met Gly Glu Ile Leu Ala
 65 70 75 80
 Ser Val Phe Thr Cys Ser Leu Met Ile Thr Val Ala Tyr Val Lys Ser
 85 90 95
 Leu Phe Leu Ser Leu Ala Ser Tyr Phe Lys Thr Thr Ala Cys Ala Arg
 100 105 110
 Phe Val Lys Ile
 115

<210> 1711
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 1711
 ngggggattc atgttagtat ttgtcagaaa aggcttttga aagagccaaa ttaaaaagag
 60
 cactagaaca tgaacaggga aagcagagga aatacttgta gaaagtattt ttacagctc
 120
 cctcaatata attcagtaat gttcattcct ggtgagaagt ctgtccgcac acacagcatc
 180
 agccaagcag cagaagcagt ggtgtctggg gggctgggaa gtttttcccc caaataccca
 240
 ccccatgcac tgcccagtcc ccagacccca aagactttgt cctgcctca cgcacctttt
 300
 gcaggctcac actgtctgtg tgcgcaagag gtagcgacag gagacaatgg ggaaagagct
 360
 gaaggaggca aacaaggcca gggggaaagc ctacctcgag gcacagaggg gccccaagat
 420
 ggatat
 426

<210> 1712
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1712
 Met Asn Arg Glu Ser Arg Gly Asn Thr Cys Arg Lys Tyr Phe Leu Gln

```

      1             5             10             15
Leu Pro Gln Tyr Asn Ser Val Met Phe Ile Pro Gly Glu Lys Ser Val
      20             25             30
Arg Thr His Ser Ile Ser Gln Ala Ala Glu Ala Val Val Ser Gly Gly
      35             40             45
Leu Gly Ser Phe Ser Pro Lys Tyr Pro Pro His Ala Leu Pro Ser Pro
      50             55             60
Gln Thr Pro Lys Thr Leu Ser Ser Pro His Ala Pro Phe Ala Gly Ser
      65             70             75             80
His Cys Leu Cys Ala Gln Glu Val Ala Thr Gly Asp Asn Gly Glu Arg
      85             90             95
Ala Glu Gly Gly Lys Gln Gly Gln Gly Glu Ser Leu Pro Arg Gly Thr
      100             105             110
Glu Gly Pro Gln Asp Gly Tyr
      115

```

<210> 1713

<211> 328

<212> DNA

<213> Homo sapiens

<400> 1713

```

tctagaaagg tttatttcat gggccaaggc ttgtgtttcc aaagccagga agggctgaag
60
ccagaattgg ccctggctgc ttgccacaga gtctggccgg gggaccctgg acctcagcag
120
ggtcattgatg aggtcagctt tggaggagca gggccagcgt gtctgtcttt ctgtcctgg
180
aatgagcctc actccctccc tgetcaaggc agcccttcac ccagccgccg ggacaggtgc
240
cctgtgccac ctgccatccc tgggattctc catctcagtg agtgctccct ggggcctggg
300
aacgcatctg gctggtgact cctggggg
328

```

<210> 1714

<211> 99

<212> PRT

<213> Homo sapiens

<400> 1714

```

Met Gly Gln Gly Leu Cys Phe Gln Ser Gln Glu Gly Leu Lys Pro Glu
1             5             10             15
Leu Ala Leu Ala Ala Cys His Arg Val Trp Pro Gly Asp Pro Gly Pro
      20             25             30
Gln Gln Gly His Asp Glu Val Ser Phe Gly Gly Ala Gly Pro Ala Cys
      35             40             45
Pro Ala Phe Cys Ser Trp Asn Glu Pro His Ser Leu Pro Ala Gln Gly
      50             55             60
Ser Pro Ser Pro Ser Arg Arg Asp Arg Cys Pro Val Pro Pro Ala Ile
      65             70             75             80
Pro Gly Ile Leu His Leu Ser Glu Cys Ser Leu Gly Pro Gly Asn Ala
      85             90             95
Ser Gly Trp

```

<210> 1715
 <211> 489
 <212> DNA
 <213> Homo sapiens

<400> 1715
 gttgccagcg atgggccgca tttgtacatc ccggtatttc gtgttcggtg tgggtgtaaaa
 60
 gatgccccat gtgtgacatt ctgtggatag ttattgttag cattatttga caagttctag
 120
 aaatcgatcc acccaggcgt gtagctgcgg tatttcatca gagttgatcg ttgcgatgag
 180
 ttgatcatgg cctgtcatgg cgtagtcttc tacgtcgtaa agtatgagac aatccacggg
 240
 aatatggtgt tttttggcca actcggaagc cgggggtgctg gggaagtcgg tccctgtaag
 300
 gtatgggcct gtcccaatga cgacgtgtgc tgggtccatg aggagtctgt ccaaggttcg
 360
 aactcattac cgtcgaatac gacgtgtgct ccacggcggt tgcgaatcg aatcctcaaa
 420
 gtgtatccgt actcgggtgtc gcgcaacagg tgcctaacct cagcgctagt gggctgtgca
 480
 ctgacgcgt
 489

<210> 1716
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 1716
 Met Ala Cys His Gly Val Val Phe Tyr Val Val Lys Tyr Glu Thr Ile
 1 5 10 15
 His Gly Asn Met Val Phe Phe Gly Gln Leu Gly Ser Arg Gly Val Gly
 20 25 30
 Glu Val Gly Pro Cys Lys Val Trp Ala Cys Pro Asn Asp Asp Val Cys
 35 40 45
 Trp Val His Glu Glu Phe Val Gln Gly Ser Asn Ser Leu Pro Ser Asn
 50 55 60
 Thr Thr Leu Ser Pro Ser Ala Val Ser Asn Arg Ile Leu Lys Val Tyr
 65 70 75 80
 Pro Tyr Ser Val Ser Arg Asn Arg Cys Leu Thr Ser Ala Leu Val Gly
 85 90 95
 Cys Ala Leu Thr Arg
 100

<210> 1717
 <211> 312
 <212> DNA
 <213> Homo sapiens

<400> 1717

nggcatacaa cggagtaaaa accacatcaa cagaagtgga aacaggccca gagagcgtga
 60
 gaggtttctg gtttcaagaa ggcacactga gtccctgcac ccgatgcctc tccttcccca
 120
 aatcccactg gaatacacag agagacataa aaacaaggag tgcctgtag cagagcagcc
 180
 aggctggctc atgagacaga gggagcagtc ttctgggaga catggctctt gctgctgcgg
 240
 atcagccaac agatccatgg aaagcaaagg gcccttctcc ggaggcttcc tggggcctgc
 300
 catgaatgtg tc
 312

<210> 1718

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1718

Met	Ala	Gly	Pro	Arg	Lys	Pro	Pro	Glu	Lys	Gly	Pro	Leu	Leu	Ser	Met
1				5				10						15	
Asp	Leu	Leu	Ala	Asp	Pro	Gln	Gln	Gln	Glu	Pro	Cys	Leu	Pro	Glu	Asp
			20					25					30		
Cys	Ser	Leu	Cys	Leu	Met	Ser	Gln	Pro	Gly	Cys	Ser	Ala	Thr	Gly	His
		35					40					45			
Ser	Leu	Phe	Leu	Cys	Leu	Ser	Val	Tyr	Ser	Ser	Gly	Ile	Trp	Gly	Arg
		50				55					60				
Arg	Gly	Ile	Gly	Cys	Arg	Asp	Ser	Val	Cys	Leu	Leu	Glu	Thr	Arg	Asn
65					70					75				80	
Leu	Ser	Arg	Ser	Leu	Gly	Leu	Phe	Pro	Leu	Leu	Leu	Met	Trp	Phe	Leu
				85					90					95	
Leu	Arg	Cys	Met	Pro											
															100

<210> 1719

<211> 404

<212> DNA

<213> Homo sapiens

<400> 1719

tgatcaccac ggccctgcca tttttgtcg ggaccgcaga ccgatgctg cccctcgaag
 60
 tcagagacaa tccaaccggc ctgcaaaact gcggtcttgc ccggggcaac gtcgtagggg
 120
 ccaacagttt ctccaacctc ataggtagaa gaagtgctat agctgctgga aatggagatg
 180
 tggatcacat cgagcagtgg gaagtcaatg cctgccgaaa ccgaccagtt cttcgtctta
 240
 gtttctgtga tggatcgctg gaccggctgc ggagtgtcgt tgagttggaa atcgtcacgt
 300
 cccagcagag ccattcgaagt agctgcgcac cacatgaacg ggctgtccgt gtcacccgga
 360
 ttcgagcagg gagcacccat tggtngtgg tgtccccggg gggt
 404

<210> 1720
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 1720
 Met Gly Ala Pro Cys Ser Asn Pro Gly Asp Thr Asp Ser Pro Phe Met
 1 5 10 15
 Trp Cys Ala Ala Thr Ser Met Ala Leu Leu Gly Arg Asp Asp Phe Gln
 20 25 30
 Leu Asn Asp Thr Pro Gln Pro Val Thr Arg Ser Ile Thr Glu Thr Lys
 35 40 45
 Thr Lys Asn Trp Ser Val Ser Ala Gly Ile Asp Phe Pro Leu Leu Asp
 50 55 60
 Val Ile His Ile Ser Ile Ser Ser Ser Tyr Ser Thr Ser Ser Thr Tyr
 65 70 75 80
 Glu Val Gly Glu Thr Val Gly Pro Tyr Asp Val Ala Pro Gly Lys Thr
 85 90 95
 Ala Val Leu Gln Ala Gly Trp Ile Val Ser Asp Phe Glu Gly Gln His
 100 105 110
 Thr Val Cys Gly Pro Asp Lys Lys Trp Gln Gly Arg Gly Asp
 115 120 125

<210> 1721
 <211> 529
 <212> DNA
 <213> Homo sapiens

<400> 1721
 ccattggccac cctttcagga cagagctgcc ctcccatgc tggaggagcc acagggcctg
 60
 gtcgtgtgg cttcagcctc ccagctcctc ctgtcctctg ctgggcactt gtaatgtcca
 120
 ggcaactcct gcttggatca ggggatctgg gtttcattct cccagctcct cctgtcctct
 180
 gctgggcacc tgtgatgtcc aggcactccc tgcttgatt gggggatctg ggtttcatct
 240
 tcccagctcc tctgtcctc cgctgggcac ctgtgatgtc caggcactcc ctgcttggat
 300
 cggggggtct gggttttgtg ctatacttgg tgctcccttt cactcaggcc ccttcttgac
 360
 tctgcagagc taccctcgc catctctttc acgcgggcct cctgcagtct ctgtgtcac
 420
 cctgtgactc tgcttccggt gttgtcaa at ggggggtcatc ccaggaccgg caccactggg
 480
 tcgtgtgcag gtttctgggg tggcagagtg cggatgagtg ggcacgcgt
 529

<210> 1722
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 1722

```

Met Ala Thr Leu Ser Gly Gln Ser Cys Pro Ser His Ala Gly Gly Ala
 1           5           10           15
Thr Gly Pro Gly Arg Cys Gly Phe Ser Leu Pro Ala Pro Pro Val Leu
          20           25           30
Cys Trp Ala Leu Val Met Ser Arg His Ser Leu Leu Gly Ser Gly Asp
          35           40           45
Leu Gly Phe Ile Phe Pro Ala Pro Pro Val Leu Cys Trp Ala Pro Val
          50           55           60
Met Ser Arg His Ser Leu Leu Gly Leu Gly Asp Leu Gly Phe Ile Phe
65           70           75           80
Pro Ala Pro Pro Val Leu Arg Trp Ala Pro Val Met Ser Arg His Ser
          85           90           95
Leu Leu Gly Ser Gly Gly Leu Gly Phe Val Leu Tyr Leu Val Leu Pro
          100          105          110
Phe Thr Gln Ala Pro Ser
          115

```

<210> 1723

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1723

```

acgcgtttga agctggatgc atggatatcc agcgccgccca tcgggtcaaa tggggtgacg
60
ctgcccttga tggtcaccgg ggcgtagcga tctaccttac cgttgatgtc gacgctcgcc
120
ggtttggcct ggcggtgtgc aatggtgccca atcttcccg tgaattgttg aatggcagtg
180
gcaaagttag gcgtgaggct gaagtcggcg aagttggccg agccatcatt gatcgcaacc
240
tgcccaatgt gaatgcccag tggcttctct ttgctggccg ccggtgtct tgttgccagt
300
gtcggccggg tcggggatca gcaagtcac gatgttggtg gggcggtcat cggtgatcgc
360
tgcattcaat a
371

```

<210> 1724

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1724

```

Met Asp Ile Gln Arg Arg His Arg Val Lys Trp Val Asp Ala Ala Leu
 1           5           10           15
Asp Gly His Arg Gly Val Ala Ile Tyr Leu Thr Val Asp Val Asp Ala
          20           25           30
Arg Arg Phe Gly Leu Ala Ala Val Asn Gly Ala Asn Leu Pro Val Glu
          35           40           45
Leu Leu Asn Gly Ser Gly Lys Val Gly Arg Glu Ala Glu Val Gly Glu
          50           55           60
Val Gly Arg Ala Ile Ile Asp Arg Asn Leu Pro Asn Val Asn Ala Gln

```

```

65              70              75              80
Trp Leu Leu Phe Ala Gly Arg Arg Leu Ser Cys Cys Gln Cys Arg Pro
              85              90              95
Gly Ala Gly Ser Ala Ser His Arg Cys Trp Trp Gly Gly His Arg
              100              105              110

```

<210> 1725

<211> 807

<212> DNA

<213> Homo sapiens

<400> 1725

```

ngtgcacctg gtatggtgcc ctctgggtct aagcctgtcc ttgtacacac tcacactttg
60
atttgaagtg acctcttccc tctgagcctt ctggtgtcca actctccctt tctctaggac
120
catgcagtgc tggaggccga gaggcagaag atgtcagccc ttgtgcgagg gctgcagagg
180
gagctggagg agacttcaga ggagacaggg cattggcaga gtatgttcca gaagaacaag
240
gaggatctta gagccaccaa gcaggaactc ctgcagctgc gaatggagaa ggaggagatg
300
gaagaggagc ttggagagaa gatagaggtc ttgcagaggg aattagagca ggcccagact
360
agtgtggag atactcgcca gggtgaggtg ctcaagaagg agctgctccg gacacaggag
420
gagcttaagg aactgcaggc agaacggcag agccaggagg tggctgggag acaccgggac
480
cgggagttgg agaagcagct ggcggtcctg agggtcgagg ctgatcgagg tcgggagctg
540
gaagaacaga acctccagct acaaaagacc ctccagcaat tgcgacagga ctgtgaagag
600
gcttccaagg ctaagatggt ggccgaggca gaggcaacag tgctggggca gcggcgggac
660
gcagtggaga cgacgcttcg ggagaccag gaggaatatg acgaattccg ccggcgcacg
720
ctgggtttgg agcagcagct gaaggagact cgaggtctgg tggatggtgg ggaagcgggtg
780
gaggcacgac tacgggacaa gctgcag
807

```

<210> 1726

<211> 230

<212> PRT

<213> Homo sapiens

<400> 1726

```

Asp His Ala Val Leu Glu Ala Glu Arg Gln Lys Met Ser Ala Leu Val
1              5              10              15
Arg Gly Leu Gln Arg Glu Leu Glu Glu Thr Ser Glu Glu Thr Gly His
20              25              30
Trp Gln Ser Met Phe Gln Lys Asn Lys Glu Asp Leu Arg Ala Thr Lys
35              40              45
Gln Glu Leu Leu Gln Leu Arg Met Glu Lys Glu Glu Met Glu Glu Glu

```


50 55 60
 Leu Gly Glu Lys Ile Glu Val Leu Gln Arg Glu Leu Glu Gln Ala Arg
 65 70 75 80
 Ala Ser Ala Gly Asp Thr Arg Gln Val Glu Val Leu Lys Lys Glu Leu
 85 90 95
 Leu Arg Thr Gln Glu Glu Leu Lys Glu Leu Gln Ala Glu Arg Gln Ser
 100 105 110
 Gln Glu Val Ala Gly Arg His Arg Asp Arg Glu Leu Glu Lys Gln Leu
 115 120 125
 Ala Val Leu Arg Val Glu Ala Asp Arg Gly Arg Glu Leu Glu Glu Gln
 130 135 140
 Asn Leu Gln Leu Gln Lys Thr Leu Gln Gln Leu Arg Gln Asp Cys Glu
 145 150 155 160
 Glu Ala Ser Lys Ala Lys Met Val Ala Glu Ala Glu Ala Thr Val Leu
 165 170 175
 Gly Gln Arg Arg Ala Ala Val Glu Thr Thr Leu Arg Glu Thr Gln Glu
 180 185 190
 Glu Asn Asp Glu Phe Arg Arg Arg Ile Leu Gly Leu Glu Gln Gln Leu
 195 200 205
 Lys Glu Thr Arg Gly Leu Val Asp Gly Gly Glu Ala Val Glu Ala Arg
 210 215 220
 Leu Arg Asp Lys Leu Gln
 225 230

<210> 1727

<211> 474

<212> DNA

<213> Homo sapiens

<400> 1727

aaccaactct ccacaacatc gccagaaaca gtcgctgcc aagaggtcca ccatgtttta
 60
 gcagcttcag aagacaaaga taagatgaaa aaggaagttt tacaaagctc aagggacatt
 120
 atgcaatcca aatcagcttg cgaaattaaa caaagtcacc aagaatgtag tacccaacaa
 180
 acacaacaga agaagtattt ggagcagttg cacttgcccc aaagcaaacc aatttcccca
 240
 aatttcaaag ttaaaacat caaacttcca actctagatc atacattaaa tgaaacagac
 300
 cacagctatg aaagtcataa acagcaatct gagattgatg ttcaaacctt taccaaaaaa
 360
 caatatctga aaaccaagaa aactgaagca agcactgaat gtagtcataa gcaatctctg
 420
 gctgaaagac attatcagtt acctaagaag gagaaaagag tgacagtaca attg
 474

<210> 1728

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1728

Met Lys Lys Glu Val Leu Gln Ser Ser Arg Asp Ile Met Gln Ser Lys

```

      1           5           10           15
Ser Ala Cys Glu Ile Lys Gln Ser His Gln Glu Cys Ser Thr Gln Gln
      20           25           30
Thr Gln Gln Lys Lys Tyr Leu Glu Gln Leu His Leu Pro Gln Ser Lys
      35           40           45
Pro Ile Ser Pro Asn Phe Lys Val Lys Thr Ile Lys Leu Pro Thr Leu
      50           55           60
Asp His Thr Leu Asn Glu Thr Asp His Ser Tyr Glu Ser His Lys Gln
      65           70           75           80
Gln Ser Glu Ile Asp Val Gln Thr Phe Thr Lys Lys Gln Tyr Leu Lys
      85           90           95
Thr Lys Lys Thr Glu Ala Ser Thr Glu Cys Ser His Lys Gln Ser Leu
      100          105          110
Ala Glu Arg His Tyr Gln Leu Pro Lys Lys Glu Lys Arg Val Thr Val
      115          120          125
Gln Leu
      130

```

<210> 1729
 <211> 470
 <212> DNA
 <213> Homo sapiens

```

<400> 1729
acgcgtgact cgccataaca ttgctgacac gttttccacg gcaagggagg catcatgacg
60
aggatcgacg tgtggctgtg gtccgtgcgc gtctataagt cccggtcgtt ggctaccgcc
120
gccgtcaagg gcggccacat tcgcctcaat ggagaccggt ttaaaccctc ccacgacgtg
180
aaaccggcg ataccgtcac catccacacc cccggatggg accgggtcct caaggtcac
240
aaccgatca cgaaaagagt cggcgccaaa ctccgggtcg aggcttacga agatctgtca
300
nngcccccg accgcctac ctctctgnet cccctcgccc gccgcgaccg tggggctgga
360
cgaccaccca agaaggatcg tcgcgagatc gatcggtccc gaggccggga ctctcgctat
420
tgaggactct tcgcccggcc caacacacca cggctcgcg cgaattggc
470

```

<210> 1730
 <211> 131
 <212> PRT
 <213> Homo sapiens

```

<400> 1730
His Val Phe His Gly Lys Gly Gly Ile Met Thr Arg Ile Asp Val Trp
      1           5           10           15
Leu Trp Ser Val Arg Val Tyr Lys Ser Arg Ser Leu Ala Thr Ala Ala
      20           25           30
Val Lys Gly Gly His Ile Arg Leu Asn Gly Asp Pro Val Lys Pro Ser
      35           40           45
His Asp Val Lys Pro Gly Asp Thr Val Thr Ile His Thr Pro Gly Trp

```

```

      50              55              60
Asp Arg Val Leu Lys Val Ile Asn Pro Ile Thr Lys Arg Val Gly Ala
65              70              75              80
Lys Leu Ala Val Glu Ala Tyr Glu Asp Leu Ser Xaa Pro Pro Asp Pro
      85              90              95
Pro Thr Ser Leu Xaa Pro Leu Ala Arg Arg Asp Arg Gly Ala Gly Arg
      100              105              110
Pro Thr Lys Lys Asp Arg Arg Glu Ile Asp Arg Leu Arg Gly Arg Asp
      115              120              125
Ser Arg Tyr
      130

```

<210> 1731

<211> 534

<212> DNA

<213> Homo sapiens

<400> 1731

```

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gagcttccag gaaccctgcg ctgtgggata aaggaatgag gttcagaaag gggcagggag
120
ttgcccgcag ccgcaccgca cgtcttcagc ccgaccgttg tcttgacctc tctgtcccg
180
ccctgccca gtctcaccat ggcttcttgg acacagctga tgctgctgct ctggaagaat
240
ttcatgtatc gccggagaca gccggtccag ctcttggtcg aattgctgtg gcctctcttc
300
ctctttcttca tcttggtggc tggtcgccac tcccaccgc ccctggagca ccatgaatgc
360
cacttcccaa acaagccact gccatcggcg ggcaccgtgc cctgggtcca gggctctatc
420
tgtaatgtga acaacacctg ctttcgcgag ctgacaccgg gcgaggagcc cgggcgcctg
480
agcaacttca acgactccct ggtctcccg cgtctacgtc ggagagaggc tgga
534

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<210> 1732

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1732

```

Met Ala Phe Trp Thr Gln Leu Met Leu Leu Leu Trp Lys Asn Phe Met
1      5      10      15
Tyr Arg Arg Arg Gln Pro Val Gln Leu Leu Val Glu Leu Leu Trp Pro
      20      25      30
Leu Phe Leu Phe Phe Ile Leu Val Ala Val Arg His Ser His Pro Pro
      35      40      45
Leu Glu His His Glu Cys His Phe Pro Asn Lys Pro Leu Pro Ser Ala
      50      55      60
Gly Thr Val Pro Trp Leu Gln Gly Leu Ile Cys Asn Val Asn Asn Thr
      65      70      75      80
Cys Phe Pro Gln Leu Thr Pro Gly Glu Glu Pro Gly Arg Leu Ser Asn

```

```
<210> 1735
<211> 342
<212> DNA
<213> Homo sapiens
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<400> 1735
 ggcgccatgg tcatcagcat catgtgttcg gcgcccgtg cacgaatgtt cgtgcgatca
 60
 agcgcgccctt ttagttcgac gcacggtaaa gcccggtgcgc atcgatgtag gccaggaccg
 120
 cgtcaggcac caggaaacgt accgacttcc cgctggccgg cagttgacgg atctgggtgg
 180
 cggacaccgc aagcgggggtc tgccagacga atgcaatatt cccgttcggc ccggtcaggg
 240
 ccaaggggtc acttaccgac cgcgcgggcca gcagggttgcg caaggcatcc ggcggttcgc
 300
 tggcggtatc cgggcgttgc aaaaccagga tgtggcaatg ct
 342

<210> 1736
 <211> 112
 <212> PRT
 <213> Homo sapiens

<400> 1736
 Met Val Ile Ser Ile Met Cys Ser Ala Pro Ala Ala Arg Met Phe Val
 1 5 10 15
 Arg Ser Ser Ala Pro Phe Ser Ser Thr His Gly Lys Ala Arg Ala His
 20 25 30
 Arg Cys Arg Pro Gly Pro Arg Gln Ala Pro Gly Asn Val Pro Thr Ser
 35 40 45
 Arg Trp Pro Ala Val Asp Gly Ser Gly Trp Arg Thr Pro Gln Ala Gly
 50 55 60
 Ser Ala Arg Arg Met Gln Tyr Ser Arg Ser Ala Arg Ser Gly Pro Arg
 65 70 75 80
 Gly His Leu Pro Thr Ala Arg Pro Ala Gly Cys Ala Arg His Pro Ala
 85 90 95
 Val Arg Trp Arg His Pro Gly Val Ala Lys Pro Gly Cys Gly Asn Ala
 100 105 110

<210> 1737
 <211> 506
 <212> DNA
 <213> Homo sapiens

<400> 1737
 acgctgttc accatgacct ggaccgccca gcggcccgac gggtcgagcg cggaggagtc
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 ggacgagacg actgtggtgg tccctgccat ctcagcgccc cacgggtacg acgtgcaggc
 120
 gtccggcgcc cacgtcacct cccaccaggg cgaccgggtg gcgcggttgc acctcaacca
 180
 aggcagtacc acggcgaagg tcacgatcac cctgcgctaa cccttcaagc gtcttcagca
 240
 ccgacctata agtctcccag acacttttac gaccggccct ccccttggg gtgggccccg
 300
 tccttttcgt gtcgtgggat gcacctggca gcaccacctc cgcccccat ggagaacagt
 360

aggtatcctc gcagggtact acggccaagg catatttgac gttccacgct tgccactgcc
 420
 gtcttagggc catactgccg ccacgcagct gagacgggtga ccaatcgggt aaggtgactg
 480
 gttgccgtag tccatgcgag gccggc
 506

<210> 1738
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1738
 Met Ala Leu Arg Arg Gln Trp Gln Ala Trp Asn Val Lys Tyr Ala Leu
 1 5 10 15
 Ala Val Val Pro Cys Glu Asp Thr Tyr Cys Ser Pro Trp Gly Pro Glu
 20 25 30
 Val Val Leu Pro Gly Ala Ser His Asp Thr Lys Arg Thr Gly Pro Thr
 35 40 45
 Pro Arg Gly Arg Ala Gly Arg Lys Ser Val Trp Glu Thr Tyr Arg Ser
 50 55 60
 Val Leu Lys Thr Leu Glu Gly Leu Ala Gln Gly Asp Arg Asp Leu Arg
 65 70 75 80
 Arg Gly Thr Ala Leu Val Glu Val Gln Pro Arg His Pro Val Ala Trp
 85 90 95
 Val Gly Gly Asp Val Gly Ala Gly Arg Leu His Val Val Pro Val Gly
 100 105 110
 Arg

<210> 1739
 <211> 420
 <212> DNA
 <213> Homo sapiens

<400> 1739
 cgcgttattg aaaatgctgc tttttttact aaattaggac agcgtttaat cggcgcat
 60
 catcaagtga cggttgatgg atttggttac cgtgttgata tgcgggttacg cccttttgg
 120
 gagtctgggc cattgggttag cacgtttaat tcaatagagg actattatca aacccatggt
 180
 cgagagtggg agtggttatgc catggttaaa gcccggtgta ttggtgttga ggacgagtat
 240
 aaacaagcgt tagaaaggat gttaaggcct ttcgtattta gacgttacat tgatttttagc
 300
 gctattgatt ctttgcgaaa aatgaaaacg atgatcagtg ctgaagtctg tgcgaagggg
 360
 ttaaaagaca atattaagtt gggaaatggga gggatccgtg aaattgaatt tgtgggtcaa
 420

<210> 1740
 <211> 140
 <212> PRT

<213> Homo sapiens

<400> 1740

```

Arg Val Ile Glu Asn Ala Ala Phe Phe Thr Lys Leu Gly Gln Arg Leu
 1           5           10           15
Ile Gly Ala Leu His Gln Val Thr Val Asp Gly Phe Val Tyr Arg Val
      20           25           30
Asp Met Arg Leu Arg Pro Phe Gly Glu Ser Gly Pro Leu Val Ser Thr
      35           40           45
Phe Asn Ser Ile Glu Asp Tyr Tyr Gln Thr His Gly Arg Glu Trp Glu
      50           55           60
Cys Tyr Ala Met Val Lys Ala Arg Val Ile Gly Val Glu Asp Glu Tyr
      65           70           75           80
Lys Gln Ala Leu Glu Arg Met Leu Arg Pro Phe Val Phe Arg Arg Tyr
      85           90           95
Ile Asp Phe Ser Ala Ile Asp Ser Leu Arg Lys Met Lys Thr Met Ile
      100          105          110
Ser Ala Glu Val Arg Arg Lys Gly Leu Lys Asp Asn Ile Lys Leu Gly
      115          120          125
Met Gly Gly Ile Arg Glu Ile Glu Phe Val Ala Gln
      130          135          140

```

<210> 1741

<211> 378

<212> DNA

<213> Homo sapiens

<400> 1741

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nnacgcgtcg aggtgattca ggccgacgcc actgaccgcg tggtccttca cagtctcaat
60
gggcaggtcg acgtcgctcg ctccaaccgc cctacgtgc cagccggcgc cgtggaggac
120
accgagacgg cccagcacga gcccacggtg gcgctctatg gcggggggccc ggacgggtga
180
gagattccga ttgacgtcct gngtgcgctc agtcgcgctg ctgccaccgg cggagtgtc
240
gtcatggagc acgaccacga gcagggggcg ctgctgccgg cggccgcttc gtgagccggg
300
ttcaagcagg ccgagaccgg tcaggacctc accggccgcg accgctacct gcgcgcggtg
360
cgtaaaccct gctggtag
378

```

<210> 1742

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1742

```

Xaa Arg Val Glu Val Ile Gln Ala Asp Ala Thr Asp Pro Leu Val Leu
 1           5           10           15
His Ser Leu Asn Gly Gln Val Asp Val Val Val Ser Asn Pro Pro Tyr
      20           25           30
Val Pro Ala Gly Ala Val Glu Asp Thr Glu Thr Ala Gln His Glu Pro

```

```
<210> 1743
<211> 4121
<212> DNA
<213> Homo sapiens
```

1372

atggatgtgg ccaacttccg gcggtgccc cgcatgccc tctacggcac ggcccagccc
1380
agcgccaagg ccctggggag catcctggcc tacctgacgg acgccaagag gaggtgcgg
1440
aaggttgctt ggggtgagcct tcgggaggag gccgtgttgg agtgtgacgg gcacacctac
1500
agcctgcggc ggccctgggccc ccctgtggct cctgaccagc tggagaccct ggaggccccg
1560
ctgaaggccc atctaagcga gcctccccc ggcaaggagg gcccctgac ctacaggttc
1620
cagacctgcc ttaccatgca ggaggtcttc agccagcacc gcagggcctg tcctggcctc
1680
acctaccacc gcatcccat gccggacttc tgtgcccccc gagaggagga ctttgaccag
1740
ctgctggagg ccctgcgggc cgccctctcc aaggaccag gcactggctt cgtgttcagc
1800
tgcctcagcg gccagggccg taccacaact gcgatggtgg tggctgtcct ggccttctgg
1860
cacatccaag gcttccccga ggtgggtgag gaggagctcg tgagtgtgcc tgatgccaa
1920
ttactaagg gtgaatttca ggtagtaatg aaggtggtgc agctgctacc cgatgggcac
1980
cgtgtgaaga aggaggtgga cgcagcgtg gacactgtca gcgagaccat gacgcccag
2040
cactaccacc tgcgggagat catcatctgc acctaccgcc aggcgaaggc agcgaagag
2100
gcgcaggaaa tgcggaggct gcagctgcgg agcctgcagt acttgagcg ctatgtctgc
2160
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2220
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2280
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2340
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2400
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2460
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2520
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2580
atcccttgca aaccaccaag gtgtgtggct gacctccagg gaggagcact cactggagtg
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2760
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2820
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2880
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2940

gcagcttcac ccagttttct ggactctcat gcccccatct ccgacctggg agacttcagg
 3000
 aatgacaacc taccagcct ggtggggctg gcaggatggt ggagggttct caaggagctg
 3060
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 3120
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 3180
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 3240
 tgccccacc tgctgcagca ggagcccaa ggagtgttag ctgaggggtg ttgctggggg
 3300
 ggtcctcatg gacagtgagg tgtgcaaggg tgcactgagg gtggtgggag gggatcacct
 3360
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 3420
 gccagacct gctgagttag aggctgctgg gatccactgt ttccacacag cgggaaggct
 3480
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 3540
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 3600
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 3660
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 3720
 catttatcca gtattgaaa atatttgacc cccttggtg aattcttttg cagaactact
 3780
 gtgtgtctgt tcactacctt ttcagggtta ttgtttttat ttttgcata attaaagcgt
 3840
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 3900
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 3960
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 4020
 ctacctcaca ggggtgttgt gaggattcat ttgtgatttt tttttttttt tttgtacaga
 4080
 gcttttaagc attaaaaaca gctaaatgtg aaaaaaaaaa a
 4121

<210> 1744

<211> 796

<212> PRT

<213> Homo sapiens

<400> 1744

Ile	Thr	Tyr	Asn	Cys	Lys	Glu	Glu	Phe	Gln	Ile	His	Asp	Glu	Leu	Leu
1				5					10					15	
Lys	Ala	His	Tyr	Thr	Leu	Gly	Arg	Leu	Ser	Asp	Asn	Thr	Pro	Glu	His
			20						25				30		
Tyr	Leu	Val	Gln	Gly	Arg	Tyr	Phe	Leu	Val	Arg	Asp	Val	Thr	Glu	Lys
		35					40					45			
Met	Asp	Val	Leu	Gly	Thr	Val	Gly	Ser	Cys	Gly	Ala	Pro	Asn	Phe	Arg

```

      50              55              60
Gln Val Gln Gly Gly Leu Thr Val Phe Gly Met Gly Gln Pro Ser Leu
65              70              75              80
Ser Gly Phe Arg Arg Val Leu Gln Lys Leu Gln Lys Asp Gly His Arg
      85              90              95
Glu Cys Val Ile Phe Cys Val Arg Glu Glu Pro Val Leu Phe Leu Arg
      100              105              110
Ala Asp Glu Asp Phe Val Ser Tyr Thr Pro Arg Asp Lys Gln Asn Leu
      115              120              125
His Glu Asn Leu Gln Gly Leu Gly Pro Gly Val Arg Val Glu Ser Leu
      130              135              140
Glu Leu Ala Ile Arg Lys Glu Ile His Asp Phe Ala Gln Leu Ser Glu
145              150              155              160
Asn Thr Tyr His Val Tyr His Asn Thr Glu Asp Leu Trp Gly Glu Pro
      165              170              175
His Ala Val Ala Ile His Gly Glu Asp Asp Leu His Val Thr Glu Glu
      180              185              190
Val Tyr Lys Arg Pro Leu Phe Leu Gln Pro Thr Tyr Arg Tyr His Arg
      195              200              205
Leu Pro Leu Pro Glu Gln Gly Ser Pro Leu Glu Ala Gln Leu Asp Ala
      210              215              220
Phe Val Ser Val Leu Arg Glu Thr Pro Ser Leu Leu Gln Leu Arg Asp
225              230              235              240
Ala His Gly Pro Pro Pro Ala Leu Val Phe Ser Cys Gln Met Gly Val
      245              250              255
Gly Arg Thr Asn Leu Gly Met Val Leu Gly Thr Leu Ile Leu Leu His
      260              265              270
Arg Ser Gly Thr Thr Ser Gln Pro Glu Ala Ala Pro Thr Gln Ala Lys
      275              280              285
Pro Leu Pro Met Glu Gln Phe Gln Val Ile Gln Ser Phe Leu Arg Met
      290              295              300
Val Pro Gln Gly Arg Arg Met Val Glu Glu Val Asp Arg Ala Ile Thr
305              310              315              320
Ala Cys Ala Glu Leu His Asp Leu Lys Glu Val Val Leu Glu Asn Gln
      325              330              335
Lys Lys Leu Glu Gly Ile Arg Pro Glu Ser Pro Ala Gln Gly Ser Gly
      340              345              350
Ser Arg His Ser Val Trp Gln Arg Ala Leu Trp Ser Leu Glu Arg Tyr
      355              360              365
Phe Tyr Leu Ile Leu Phe Asn Tyr Tyr Leu His Glu Gln Tyr Pro Leu
      370              375              380
Ala Phe Ala Leu Ser Phe Ser Arg Trp Leu Cys Ala His Pro Glu Leu
385              390              395              400
Tyr Arg Leu Pro Val Thr Leu Ser Ser Ala Gly Pro Val Ala Pro Arg
      405              410              415
Asp Leu Ile Ala Arg Gly Ser Leu Arg Glu Asp Asp Leu Val Ser Pro
      420              425              430
Asp Ala Leu Ser Thr Val Arg Glu Met Asp Val Ala Asn Phe Arg Arg
      435              440              445
Val Pro Arg Met Pro Ile Tyr Gly Thr Ala Gln Pro Ser Ala Lys Ala
      450              455              460
Leu Gly Ser Ile Leu Ala Tyr Leu Thr Asp Ala Lys Arg Arg Leu Arg
465              470              475              480
Lys Val Val Trp Val Ser Leu Arg Glu Glu Ala Val Leu Glu Cys Asp

```

485 490 495
 Gly His Thr Tyr Ser Leu Arg Trp Pro Gly Pro Pro Val Ala Pro Asp
 500 505 510
 Gln Leu Glu Thr Leu Glu Ala Gln Leu Lys Ala His Leu Ser Glu Pro
 515 520 525
 Pro Pro Gly Lys Glu Gly Pro Leu Thr Tyr Arg Phe Gln Thr Cys Leu
 530 535 540
 Thr Met Gln Glu Val Phe Ser Gln His Arg Arg Ala Cys Pro Gly Leu
 545 550 555 560
 Thr Tyr His Arg Ile Pro Met Pro Asp Phe Cys Ala Pro Arg Glu Glu
 565 570 575
 Asp Phe Asp Gln Leu Leu Glu Ala Leu Arg Ala Ala Leu Ser Lys Asp
 580 585 590
 Pro Gly Thr Gly Phe Val Phe Ser Cys Leu Ser Gly Gln Gly Arg Thr
 595 600 605
 Thr Thr Ala Met Val Val Ala Val Leu Ala Phe Trp His Ile Gln Gly
 610 615 620
 Phe Pro Glu Val Gly Glu Glu Glu Leu Val Ser Val Pro Asp Ala Lys
 625 630 635 640
 Phe Thr Lys Gly Glu Phe Gln Val Val Met Lys Val Val Gln Leu Leu
 645 650 655
 Pro Asp Gly His Arg Val Lys Lys Glu Val Asp Ala Ala Leu Asp Thr
 660 665 670
 Val Ser Glu Thr Met Thr Pro Met His Tyr His Leu Arg Glu Ile Ile
 675 680 685
 Ile Cys Thr Tyr Arg Gln Ala Lys Ala Ala Lys Glu Ala Gln Glu Met
 690 695 700
 Arg Arg Leu Gln Leu Arg Ser Leu Gln Tyr Leu Glu Arg Tyr Val Cys
 705 710 715 720
 Leu Ile Leu Phe Asn Ala Tyr Leu His Leu Glu Lys Ala Asp Ser Trp
 725 730 735
 Gln Arg Pro Phe Ser Thr Trp Met Gln Glu Val Ala Ser Lys Ala Gly
 740 745 750
 Ile Tyr Glu Ile Leu Asn Glu Leu Gly Phe Pro Glu Leu Glu Ser Gly
 755 760 765
 Glu Asp Gln Pro Phe Ser Arg Leu Arg Tyr Arg Trp Gln Glu Gln Ser
 770 775 780
 Cys Ser Leu Glu Pro Ser Ala Pro Glu Asp Leu Leu
 785 790 795

<210> 1745

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1745

ntcacatgaaaa ttaaaaaatg gcttggtgta gcagcccttg ctacagtcgc aggtttggct
 60
 cttgcagctt gcggaaactc agaaaagaaa gcagacaatg caacaactat caaaatcgca
 120
 actgttaacc gtagcgggtc tgaagaaaaa cgttgggaca aaatccaaga attggttaaa
 180
 aaagacggta tcacttttga atttacggag ttcacaggct actcacaacc aaacaaggca
 240

actgctgatg gcgaagtaga tttgaacgct ttccaacact ataacttctt gaacaactgg
 300
 aacaaagaaa acgggaaaga ccttgtagcg attgcagata cttacatctc tccaatccgt
 360
 ctttactcag gtttgaatgg aagtgacaac aagtacacta aagtagaggc tggagtgtgc
 420
 tcgcga
 426

<210> 1746
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 1746
 Xaa Met Lys Ile Lys Lys Trp Leu Gly Val Ala Ala Leu Ala Thr Val
 1 5 10 15
 Ala Gly Leu Ala Leu Ala Ala Cys Gly Asn Ser Glu Lys Lys Ala Asp
 20 25 30
 Asn Ala Thr Thr Ile Lys Ile Ala Thr Val Asn Arg Ser Gly Ser Glu
 35 40 45
 Glu Lys Arg Trp Asp Lys Ile Gln Glu Leu Val Lys Lys Asp Gly Ile
 50 55 60
 Thr Leu Glu Phe Thr Glu Phe Thr Gly Tyr Ser Gln Pro Asn Lys Ala
 65 70 75 80
 Thr Ala Asp Gly Glu Val Asp Leu Asn Ala Phe Gln His Tyr Asn Phe
 85 90 95
 Leu Asn Asn Trp Asn Lys Glu Asn Gly Lys Asp Leu Val Ala Ile Ala
 100 105 110
 Asp Thr Tyr Ile Ser Pro Ile Arg Leu Tyr Ser Gly Leu Asn Gly Ser
 115 120 125
 Asp Asn Lys Tyr Thr Lys Val Glu Ala Gly Val Cys Ser Arg
 130 135 140

<210> 1747
 <211> 373
 <212> DNA
 <213> Homo sapiens

<400> 1747
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 atcaccgccc ctgaaggcgt gttggaggca ccggcggggc cgctcctcaa ggacggcacg
 120
 tggcacatca tgtaccagta cgaaccacac gcggatgggc acggcctctg gggacatgtc
 180
 acttccccca acttctctcc ctttaactgg acagacggag aagacattct ggttccagag
 240
 ggcgaggaaa ccgacctgtg ggcaggttct gttattagca acgctggaaa agtgacgctg
 300
 ttttttacct ccgtcaaggc cgacnaagac ggaaatccat cgggcagatg tcgccgacgg
 360
 caaagctacg cgt
 373

```

<400> 1748
Met Val Thr His Arg Pro Glu Leu His Ile Thr Ala Pro Glu Gly Val
  1                    5                10                15
Leu Glu Ala Pro Ala Gly Ser Leu Leu Lys Asp Gly Thr Trp His Ile
      20                25                30
Met Tyr Gln Tyr Glu Pro His Ala Asp Gly His Gly Leu Trp Gly His
      35                40                45
Val Thr Ser Pro Asn Phe Ser Pro Phe Asn Trp Thr Asp Gly Glu Asp
      50                55                60
Ile Leu Val Pro Glu Gly Glu Glu Thr Asp Leu Trp Ala Gly Ser Val
  65                70                75                80
Ile Ser Asn Ala Gly Lys Val Thr Leu Phe Phe Thr Ser Val Lys Gly
      85                90                95
Asp Xaa Asp Gly Asn Pro Ser Gly Arg Cys Arg Arg Arg Gln Ser Tyr
      100                105                110
Ala

```

```

<400> 1749
cccagcaggc aaagagagag gcctccctgg ctctcagtggt caggggagcc gcgttcctc
60
ccagggctgg agcagaggac cacaaggcag cagaaagcgc ggggtccagat gagggccagg
120
aagggggagga gagtggaggc caagaacgag ccttaaggga gcagtcccaa gctggagcca
180
cccagggctg ggtctgggag tcctcagtggt ccacttgctc caggttagggt ggcttgctt
240
gctctctcca gggccagtct ctgtgtgtgg ggactcagcc cgtggccggc agatgccatc
300
caggatgtac aagggtgcagc caaggcaggc catgcagggg ccgggcctgt ctgcagctgg
360
tggatgcctg tgggcatggc tttctctggg gacccattc ctgtcagtag caaccctggc
420
agtgtccgga gcggctctag acaactttgg tcataggaac tctggagggtg ggttctggtc
480
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540
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600
accactgtg tactggcccc gctcaggccg gcctggcaca ccgttgctg ctggcggctc
660
tcatggggaa gcgcctgggc actggggatt gcttgtgggc cactcaactc ttggggcagt
720

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ggccgtaacc ctagtttgcc tgaggccctt atgtcccctt atgttcctgg tactggagct
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 840
 aggacactga gga
 853

<210> 1750
 <211> 64
 <212> PRT
 <213> Homo sapiens

<400> 1750
 Glu Lys Pro Arg Thr His Cys Val Leu Ala Pro Leu Arg Pro Ala Trp
 1 5 10 15
 His Thr Val Ala Cys Trp Arg Leu Ser Trp Gly Ser Ala Trp Ala Leu
 20 25 30
 Gly Ile Ala Cys Gly Pro Leu Asn Ser Trp Gly Ser Gly Arg Asn Pro
 35 40 45
 Ser Leu Pro Glu Ala Leu Met Ser Pro Tyr Val Pro Gly Thr Gly Ala
 50 55 60

<210> 1751
 <211> 531
 <212> DNA
 <213> Homo sapiens

<400> 1751
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 60
 gacgatgccg ttgtcgagaa ggccatggcg acgaccgggg tctccgagct tactgatagg
 120
 gcatggtctt ccctgtcagg aggagagagg caacgggtac agctggctcg tgccttggca
 180
 caggagcccg agatcttatt tcttgacgag ccgacaaatc accttgactt gccacaccag
 240
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 360
 gctggcggac cggcgagcac agtgctgacg cctggccttg tccgtgacca ctttgggtgc
 420
 gacggtgagg tttggtcctc ctcgaggcgc ggcttcacct ggaacgggct gcagacatga
 480
 cgacgcgtat cgcagtatcc ctccgatggg acgacgccat tgacttgagc c
 531

<210> 1752
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 1752
 Gly Arg Ile Pro His Leu Gly Arg Trp Arg Met Gly Asn Phe Ser Arg

```

      1           5           10           15
Arg Gln Gly His Asp Asp Ala Val Val Glu Lys Ala Met Ala Thr Thr
      20           25           30
Gly Val Ser Glu Leu Thr Asp Arg Ala Trp Ser Ser Leu Ser Gly Gly
      35           40           45
Glu Arg Gln Arg Val Gln Leu Ala Arg Ala Leu Ala Gln Glu Pro Glu
      50           55           60
Ile Leu Phe Leu Asp Glu Pro Thr Asn His Leu Asp Leu Pro His Gln
      65           70           75           80
Ile Asp Leu Leu Glu Arg Val Arg Gly Leu Gly Leu Thr Thr Val Thr
      85           90           95
Val Ile His Asp Leu Asp Leu Ala Ala Tyr Ala Asp Asp Leu Ile
      100          105          110
Val Leu Asp Ser Gly Arg Met Val Ala Gly Gly Pro Ala Ser Thr Val
      115          120          125
Leu Thr Pro Gly Leu Val Arg Asp His Phe Gly Val Asp Gly Glu Val
      130          135          140
Trp Ser Ser Ser Arg Arg Gly Phe Thr Trp Asn Gly Leu Gln Thr
      145          150          155

```

<210> 1753

<211> 920

<212> DNA

<213> Homo sapiens

<400> 1753

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gagacagtgg agaggctggg tcagtccctt gccaggaca ccccggtcct ggggccttgc
60
tggaaccca tggtcttggg gactcagggc cgcttctgctc tggacagggg ttccaaggac
120
acacagacca ggatcagcca aaagggccgc cgtctgcagc ccccggggac tccctcggcc
180
ccacccaga gaaggccccg gaaacagctg aaccctgcc ggggcaccga gagagtggac
240
cctgggttcg agggggtgac tctgaagttt cagataaagc cggactccag cctgcagatc
300
atccccacgt acagcctgcc ctgcagtagc cgttctcagg aatccccctg agatgctgtt
360
gggggccccg cagccatccc agagggcacc gagggccact cagcaggcag cgaggccctg
420
gagccccggc gctgtgcttc ctgtcggacc cagaggaccc cgctctggag agacgctgaa
480
gatgggaccc ttctctgcaa cgcttctggg atcaggtaca agaaatacgg cactcgtctc
540
tccagctgct ggctgggtgcc caggaaaaat gtccagccca agaggctatg tggcagatgt
600
ggagtgtccc tggaccccat tcaggaagggt taaaccacgc ttcaccctgc tgagctgctg
660
cttctgcctc cgtttcacca gtgggagaat gggcagaagc agctctccta ggaggattgg
720
ggaaagagcc ggctgcctc ctctctgcca tctccagatt caaggatccc gggggaagac
780
ccaggcctca ggtggcagag cctgctaggg gtcaccagcc ccttctccag tcagccttgg
840

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ccgaggcccc ctcaggagac gctctcagga aggatgagca ttgttacagc agggacaata
 900
 aagtacagag atatgccgag
 920

<210> 1754
 <211> 210
 <212> PRT
 <213> Homo sapiens

<400> 1754
 Glu Thr Val Glu Arg Leu Gly Gln Ser Pro Ala Gln Asp Thr Pro Val
 1 5 10 15
 Leu Gly Pro Cys Trp Asp Pro Met Ala Leu Gly Thr Gln Gly Arg Leu
 20 25 30
 Leu Leu Asp Arg Asp Ser Lys Asp Thr Gln Thr Arg Ile Ser Gln Lys
 35 40 45
 Gly Arg Arg Leu Gln Pro Pro Gly Thr Pro Ser Ala Pro Pro Gln Arg
 50 55 60
 Arg Pro Arg Lys Gln Leu Asn Pro Cys Arg Gly Thr Glu Arg Val Asp
 65 70 75 80
 Pro Gly Phe Glu Gly Val Thr Leu Lys Phe Gln Ile Lys Pro Asp Ser
 85 90 95
 Ser Leu Gln Ile Ile Pro Thr Tyr Ser Leu Pro Cys Ser Ser Arg Ser
 100 105 110
 Gln Glu Ser Pro Ala Asp Ala Val Gly Gly Xaa Ala Ala Ile Pro Glu
 115 120 125
 Gly Thr Glu Gly His Ser Ala Gly Ser Glu Ala Leu Glu Pro Arg Arg
 130 135 140
 Cys Ala Ser Cys Arg Thr Gln Arg Thr Pro Leu Trp Arg Asp Ala Glu
 145 150 155 160
 Asp Gly Thr Leu Leu Cys Asn Ala Cys Gly Ile Arg Tyr Lys Lys Tyr
 165 170 175
 Gly Thr Arg Cys Ser Ser Cys Trp Leu Val Pro Arg Lys Asn Val Gln
 180 185 190
 Pro Lys Arg Leu Cys Gly Arg Cys Gly Val Ser Leu Asp Pro Ile Gln
 195 200 205
 Glu Gly
 210

<210> 1755
 <211> 437
 <212> DNA
 <213> Homo sapiens

<400> 1755
 nnttctgcag agtagggaga cagtcttggg cctggatggc cattagtgtc tggagtcacg
 60
 ggagcaatca gaaatgatca aggagaatcc ttgatacgaa ctgcattcca gtgtcttcag
 120
 ttggttgatga cagattttct accaacaatg ccttgactct gcctgcaa atgtgttagat
 180
 gttgcaggta gctttggcct ccataaccaa gaactcaata ttagtttaac ttcaataggt
 240

ttattgtgga atatttcaga ttatttttttc caaagagggg aaactattga aaaagaacta
 300
 aataaggaag aggcagcaca gcaaaagcag gcagaagaga aaggagttgt tttaaactcg
 360
 ccattccacc ctgcaccgcc atttgattgc ttgtgggttat gtctttatgc aaaattgggt
 420
 gaactatgtg tggatcc
 437

<210> 1756

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1756

Met	Gly	Ala	Ile	Arg	Asn	Asp	Gln	Gly	Glu	Ser	Leu	Ile	Arg	Thr	Ala
1				5				10					15		
Phe	Gln	Cys	Leu	Gln	Leu	Val	Val	Thr	Asp	Phe	Leu	Pro	Thr	Met	Pro
			20					25					30		
Cys	Thr	Cys	Leu	Gln	Ile	Val	Val	Asp	Val	Ala	Gly	Ser	Phe	Gly	Leu
			35				40					45			
His	Asn	Gln	Glu	Leu	Asn	Ile	Ser	Leu	Thr	Ser	Ile	Gly	Leu	Leu	Trp
	50					55					60				
Asn	Ile	Ser	Asp	Tyr	Phe	Phe	Gln	Arg	Gly	Glu	Thr	Ile	Glu	Lys	Glu
65					70					75				80	
Leu	Asn	Lys	Glu	Glu	Ala	Ala	Gln	Gln	Lys	Gln	Ala	Glu	Glu	Lys	Gly
			85					90						95	
Val	Val	Leu	Asn	Arg	Pro	Phe	His	Pro	Ala	Pro	Pro	Phe	Asp	Cys	Leu
			100					105					110		
Trp	Leu	Cys	Leu	Tyr	Ala	Lys	Leu	Gly	Glu	Leu	Cys	Val	Asp		
			115				120					125			

<210> 1757

<211> 1297

<212> DNA

<213> Homo sapiens

<400> 1757

nggatccgac ggaaatagaa ttgaaggcat tctaaaatgg ctaaccgtac agtgaaggat
 60
 gcgcacagca tccatggcac caaccctcaa tatctggtgg agaagatcat tcgaacgcga
 120
 atctatgagt ccaagtactg gaaagaggag tgctttggac ttacagctga acttgtagtc
 180
 gataaagcca tggagttaag gtttgtgggt ggcgtctatg gtggcaacat aaaaccaaca
 240
 ccctttctgt gtttaacctt gaagatgctt caaattcaac ccgagaagga tatcattgta
 300
 gagtttatca aaaatgaaga tttcaagtat gtccgcatgc tgggggcact ttacatgagg
 360
 ctgacaggca ctgcaattga ttgctacaag tacttggaac ctttgtacaa tgactatcga
 420
 aaaatcaaga gccagaaccg aaatggggag tttgaattga tgcattgtga tgagtttatt
 480

gatgaactat tgcacagtga gagagtctgt gatatcattc tgccccgact acagaaacgc
 540
 tatgtattag aggaagctga gcaactggag cctcgagtta gtgctctgga agaggacatg
 600
 gatgatgtgg agtccagtga agaggaagaa gaggaggatg agaagttgga aagagtgcc
 660
 tcacctgac accgccggag aagctaccga gacttggaca agccccgtcg ctctcccaca
 720
 ctgcgtaca ggaggagtag gagccggtct cccagaaggc ggagtcgac tcccaaaagg
 780
 agaagccccct cccctcgccg agaaaggcat cggagcaaga gtccaagacg tcaccgcagc
 840
 aggtcccgag atcggcggca cagatcccgt tccaagtccc caggatcatca ccgtagtcac
 900
 agacacagga gccactcaaa gtctcccgaa aggtctaaga agagccacaa gaagagccgg
 960
 agaggggaatg agtaatggac tcagtttggt tttagtccac atggcctcct gtggatataa
 1020
 ggatatctgt atgtggaagg attaagatct cccccaggca gctataagaa tatttttagtt
 1080
 tttttcttat caagtctctc aacctttatt tttaatgaag gaggtgctga gttttgtatc
 1140
 tttttaatca taatcaacat cagtttttga cccaactaac cttgactgta ttcaaactta
 1200
 tgagagtata aaggatctgg aggttgggga tatgactgac aaggaaaggc tgtggccacc
 1260
 tgatgaccct ttcccttttt attaaaccgg acacacc
 1297

<210> 1758

<211> 312

<212> PRT

<213> Homo sapiens

<400> 1758

Met	Ala	Asn	Arg	Thr	Val	Lys	Asp	Ala	His	Ser	Ile	His	Gly	Thr	Asn
1				5					10					15	
Pro	Gln	Tyr	Leu	Val	Glu	Lys	Ile	Ile	Arg	Thr	Arg	Ile	Tyr	Glu	Ser
			20						25				30		
Lys	Tyr	Trp	Lys	Glu	Glu	Cys	Phe	Gly	Leu	Thr	Ala	Glu	Leu	Val	Val
		35					40					45			
Asp	Lys	Ala	Met	Glu	Leu	Arg	Phe	Val	Gly	Gly	Val	Tyr	Gly	Gly	Asn
	50					55					60				
Ile	Lys	Pro	Thr	Pro	Phe	Leu	Cys	Leu	Thr	Leu	Lys	Met	Leu	Gln	Ile
	65				70					75				80	
Gln	Pro	Glu	Lys	Asp	Ile	Ile	Val	Glu	Phe	Ile	Lys	Asn	Glu	Asp	Phe
			85						90					95	
Lys	Tyr	Val	Arg	Met	Leu	Gly	Ala	Leu	Tyr	Met	Arg	Leu	Thr	Gly	Thr
		100						105					110		
Ala	Ile	Asp	Cys	Tyr	Lys	Tyr	Leu	Glu	Pro	Leu	Tyr	Asn	Asp	Tyr	Arg
	115						120					125			
Lys	Ile	Lys	Ser	Gln	Asn	Arg	Asn	Gly	Glu	Phe	Glu	Leu	Met	His	Val
	130				135						140				
Asp	Glu	Phe	Ile	Asp	Glu	Leu	Leu	His	Ser	Glu	Arg	Val	Cys	Asp	Ile

```

145          150          155          160
Ile Leu Pro Arg Leu Gln Lys Arg Tyr Val Leu Glu Glu Ala Glu Gln
          165          170          175
Leu Glu Pro Arg Val Ser Ala Leu Glu Glu Asp Met Asp Asp Val Glu
          180          185          190
Ser Ser Glu Glu Glu Glu Glu Asp Glu Lys Leu Glu Arg Val Pro
          195          200          205
Ser Pro Asp His Arg Arg Arg Ser Tyr Arg Asp Leu Asp Lys Pro Arg
          210          215          220
Arg Ser Pro Thr Leu Arg Tyr Arg Arg Ser Arg Ser Arg Ser Pro Arg
225          230          235          240
Arg Arg Ser Arg Ser Pro Lys Arg Arg Ser Pro Ser Pro Arg Arg Glu
          245          250          255
Arg His Arg Ser Lys Ser Pro Arg Arg His Arg Ser Arg Ser Arg Asp
          260          265          270
Arg Arg His Arg Ser Arg Ser Lys Ser Pro Gly His His Arg Ser His
          275          280          285
Arg His Arg Ser His Ser Lys Ser Pro Glu Arg Ser Lys Lys Ser His
          290          295          300
Lys Lys Ser Arg Arg Gly Asn Glu
305          310

```

<210> 1759
 <211> 324
 <212> DNA
 <213> Homo sapiens

```

<400> 1759
aattccatag tcctcatggg caagagttac acagcgtgga ggaccaactc ccaggcactc
60
ggcctgggca gacacaatta ttgtcggaat ccagatgggtg atgccagacc ttgggtgccat
120
gtgatgaagg accgaaagct gacgtgggaa tactgtgaca tgtcccatg ctccacctgt
180
ggcctgaggc agtgcaaagc gcctcagttt agaactaaag gaggactcta cacagacatc
240
acctcacacc cttggcaggc tgccatcttt gtcagcaaca agaggtctcc tggagagaga
300
ttcctttgtg gaggggtgct gatc
324

```

<210> 1760
 <211> 108
 <212> PRT
 <213> Homo sapiens

```

<400> 1760
Asn Ser Ile Val Leu Met Gly Lys Ser Tyr Thr Ala Trp Arg Thr Asn
1          5          10          15
Ser Gln Ala Leu Gly Leu Gly Arg His Asn Tyr Cys Arg Asn Pro Asp
          20          25          30
Gly Asp Ala Arg Pro Trp Cys His Val Met Lys Asp Arg Lys Leu Thr
          35          40          45
Trp Glu Tyr Cys Asp Met Ser Pro Cys Ser Thr Cys Gly Leu Arg Gln

```

```

      50              55              60
Cys Lys Arg Pro Gln Phe Arg Thr Lys Gly Gly Leu Tyr Thr Asp Ile
65              70              75              80
Thr Ser His Pro Trp Gln Ala Ala Ile Phe Val Ser Asn Lys Arg Ser
      85              90              95
Pro Gly Glu Arg Phe Leu Cys Gly Gly Val Leu Ile
      100              105

```

<210> 1761
 <211> 351
 <212> DNA
 <213> Homo sapiens

```

<400> 1761
ngcgatctcg gctcactaca acctcgggtga cagagcgaga ctctatccca aaaaaataaa
60
aataaaaaatc aactggagaa ggaaatgggg ttggggagca tcctctgaat atataaaggc
120
agccattcat ttaggagag gaggtagaag gaaatgctgt ttgtcgatgg ttcttttcca
180
gagaggaaga gaggagaaag gaagagcggg gagcaggtgg ggagcccga gtaagacccc
240
acagtggggc caggtggtct tgcacctgt attcccactt tggctggggc agcccagagt
300
ccaggccagc aggtaatgcc ccagccatgc ccaactgggc ctattggatc c
351

```

<210> 1762
 <211> 109
 <212> PRT
 <213> Homo sapiens

```

<400> 1762
Met Ala Gly Ala Leu Pro Ala Gly Leu Asp Ser Gly Leu Pro Gln Pro
1              5              10              15
Lys Trp Glu Tyr Arg Val Gln Asp His Leu Ala Pro Leu Trp Gly Leu
      20              25              30
Thr Ala Gly Ser Pro Pro Ala Pro Arg Ser Ser Phe Leu Leu Ser Ser
      35              40              45
Ser Leu Glu Lys Asn His Arg Gln Thr Ala Phe Pro Ser Thr Ser Ser
      50              55              60
Pro Thr Met Asn Gly Cys Leu Tyr Ile Phe Arg Gly Cys Ser Pro Thr
65              70              75              80
Pro Phe Pro Ser Pro Val Asp Phe Tyr Phe Tyr Phe Phe Gly Ile Glu
      85              90              95
Ser Arg Ser Val Thr Glu Val Val Val Ser Arg Asp Arg
      100              105

```

<210> 1763
 <211> 356
 <212> DNA
 <213> Homo sapiens

<400> 1763

gcgcgcggg ggcgcatgt ggagcgggca cttaccggtt tcatggccaa gacaggcgag
 60
 actcagagtc ttttcaaaga tgacgtcagc acatttccat tgattgctgc cagacctttc
 120
 accatccccct acctgacagc tcttcttccg tctgaactgg agatgcaaca aatggaagag
 180
 acagattcct cggagcagga tgaacagaca gacacagaga accttgcctt tcatatcagc
 240
 atggaggatt ctggagccga gaaagagaac acctctgtcc tgcagcagaa cccctccttg
 300
 tcgggttagcc ggaatgggga ggagaacatc atcgataacc cttatctgcg accggt
 356

<210> 1764
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 1764
 Ala Arg Arg Gly Arg Asp Val Glu Arg Ala Leu Thr Arg Phe Met Ala
 1 5 10 15
 Lys Thr Gly Glu Thr Gln Ser Leu Phe Lys Asp Asp Val Ser Thr Phe
 20 25 30
 Pro Leu Ile Ala Ala Arg Pro Phe Thr Ile Pro Tyr Leu Thr Ala Leu
 35 40 45
 Leu Pro Ser Glu Leu Glu Met Gln Gln Met Glu Glu Thr Asp Ser Ser
 50 55 60
 Glu Gln Asp Glu Gln Thr Asp Thr Glu Asn Leu Ala Leu His Ile Ser
 65 70 75 80
 Met Glu Asp Ser Gly Ala Glu Lys Glu Asn Thr Ser Val Leu Gln Gln
 85 90 95
 Asn Pro Ser Leu Ser Gly Ser Arg Asn Gly Glu Glu Asn Ile Ile Asp
 100 105 110
 Asn Pro Tyr Leu Arg Pro
 115

<210> 1765
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 1765
 cggccgcatt cttcgtgact ggcgctccgc cgccggtgca aaagtgtcag gaaataccag
 60
 tcatgactat gtttagccgc acctctctgc agtatgcgat cgttctggca gcgctgggag
 120
 gtgccggtct ggcgctctgg gccatgtcga gtgcgacgga ggccaatcag gcggaaattg
 180
 cccaggccag gccaggcatt attgcggcgg cgcgcggtgt cgtggatgtc gagggcgggc
 240
 tgctgcggct ctccacccag cgcgacgggg tgattcagga tgtgccggtg aaggaaggac
 300
 agcgggtcaa agccggcgat atcctcgccg cgctcgacaa tcgccgcgaa ctgatcg
 357

<210> 1766
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1766
 Met Thr Met Phe Ser Arg Thr Ser Leu Gln Tyr Ala Ile Val Leu Ala
 1 5 10 15
 Ala Leu Gly Gly Ala Gly Leu Ala Leu Trp Ala Met Ser Ser Ala Thr
 20 25 30
 Glu Ala Asn Gln Ala Glu Ile Ala Gln Ala Arg Pro Gly Ile Ile Ala
 35 40 45
 Ala Ala Arg Gly Val Val Asp Val Glu Gly Gly Leu Leu Arg Leu Ser
 50 55 60
 Thr Gln Arg Asp Gly Val Ile Gln Asp Val Pro Val Lys Glu Gly Gln
 65 70 75 80
 Arg Val Lys Ala Gly Asp Ile Leu Ala Ala Leu Asp Asn Arg Arg Glu
 85 90 95
 Leu Ile

<210> 1767
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 1767
 nnncgcccgcac ggccgcccacg acgcaccgca ttgacgtgaa ccagggcgac gatgccaacc
 60
 ccggccaaca cgccaggctg cttgacgccc ccagccaacc cgacgaacgc cccaccaaga
 120
 acgagcccga gccatccccg gccaatcaac gccagacgta tggccacaac gagtgcgacg
 180
 agggacaaaac ccacctggag tccgtcggtg tgcattgcccc ccaccacgct caacgtcgtc
 240
 aatggacagc acaccgccag ccagagggca tgatccggat cggttccggc gtagcgn
 297

<210> 1768
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 1768
 Met Pro Thr Pro Ala Asn Thr Pro Gly Cys Leu Thr Pro Pro Ala Asn
 1 5 10 15
 Pro Thr Asn Ala Pro Pro Arg Thr Ser Pro Ser His Pro Arg Pro Ile
 20 25 30
 Asn Ala Arg Arg Met Ala Thr Thr Ser Ala Thr Arg Asp Lys Pro Thr
 35 40 45
 Trp Ser Pro Ser Leu Cys Met Pro Pro Thr Thr Leu Asn Val Val Asn
 50 55 60
 Gly Gln His Thr Ala Ser Gln Arg Ala

65

70

<210> 1769

<211> 474

<212> DNA

<213> Homo sapiens

<400> 1769

caccatgctg gctcggttcg acgcattcgg gtgggtgagt ctgttctcgt caccgacggg
 60
 caggggtcatg ccgttcgtgg ccctgccatt gaggtgacga aagggtcagt tagcgtcgag
 120
 accgttgaga tcctccatac tcccgcgacc acgcacgat gggtcgccgt ccaggcattg
 180
 ccgaagtccg atagagctga gctggcggtg gcgacctca ccgagatggg agttcacgaa
 240
 atcctcgctt ggcaggctga tcggagcatc gtgcgatgga agggcgacaa gcaagccaag
 300
 ggcgtcgcga ggtggcaagc ggctgcccggt gaggccacca aacagtctcg acgttttctt
 360
 gtgccacagg tagaactagc gcaaaccctg gaagttgtta agcggatttg caatgcccag
 420
 gccgcctacg ttttgacga gtcggccagt gaaccgctgg tgcacagga gctc
 474

<210> 1770

<211> 158

<212> PRT

<213> Homo sapiens

<400> 1770

His	His	Ala	Gly	Ser	Val	Arg	Arg	Ile	Arg	Val	Gly	Glu	Ser	Val	Leu
1				5					10					15	
Val	Thr	Asp	Gly	Gln	Gly	His	Ala	Val	Arg	Gly	Pro	Ala	Ile	Glu	Val
			20					25				30			
Thr	Lys	Gly	Ser	Val	Ser	Val	Glu	Thr	Val	Glu	Ile	Leu	His	Thr	Pro
		35				40					45				
Ala	Thr	Thr	His	Arg	Trp	Val	Ala	Val	Gln	Ala	Leu	Pro	Lys	Ser	Asp
	50				55				60						
Arg	Ala	Glu	Leu	Ala	Val	Ala	Thr	Leu	Thr	Glu	Met	Gly	Val	His	Glu
65				70					75					80	
Ile	Leu	Ala	Trp	Gln	Ala	Asp	Arg	Ser	Ile	Val	Arg	Trp	Lys	Gly	Asp
			85					90					95		
Lys	Gln	Ala	Lys	Gly	Val	Ala	Arg	Trp	Gln	Ala	Ala	Ala	Arg	Glu	Ala
		100					105						110		
Thr	Lys	Gln	Ser	Arg	Arg	Phe	Leu	Val	Pro	Gln	Val	Glu	Leu	Ala	Gln
	115					120					125				
Thr	Arg	Glu	Val	Val	Lys	Arg	Ile	Cys	Asn	Ala	Gln	Ala	Ala	Tyr	Val
	130				135					140					
Leu	His	Glu	Ser	Ala	Ser	Glu	Pro	Leu	Val	His	Gln	Glu	Leu		
145					150					155					

<210> 1771

<211> 287

<212> DNA

<213> Homo sapiens

<400> 1771

acgcgtgatg ggtaattcta atacatgcaa agaattatct ctgcaagtat actcagatat
 60
 taataacagc ggggtgtcgca gaggaagaag cctgggagaa tggaagtcag ggaaggagag
 120
 caacaggett ctactctgt gccatgagca tgtgctagcc atggagacac tctgcatgtt
 180
 acctagaact gctgattcat tgctctggaa ttattcagct attcaagacc cagtgaata
 240
 cagcaagcag ctttcattca tacacacaca tgtgcatcca tgtgcac
 287

<210> 1772

<211> 93

<212> PRT

<213> Homo sapiens

<400> 1772

Met	Gly	Asn	Ser	Asn	Thr	Cys	Lys	Glu	Leu	Ser	Leu	Gln	Val	Tyr	Ser
1				5					10				15		
Asp	Ile	Asn	Asn	Ser	Gly	Cys	Arg	Arg	Gly	Arg	Ser	Leu	Gly	Glu	Trp
			20					25				30			
Lys	Ser	Gly	Lys	Glu	Ser	Asn	Arg	Leu	Leu	Thr	Leu	Cys	His	Glu	His
		35				40					45				
Val	Leu	Ala	Met	Glu	Thr	Leu	Cys	Met	Leu	Pro	Arg	Thr	Ala	Asp	Ser
	50					55				60					
Leu	Leu	Trp	Asn	Tyr	Ser	Ala	Ile	Gln	Asp	Pro	Val	Lys	Tyr	Ser	Lys
65				70					75					80	
Gln	Leu	Ser	Phe	Ile	His	Thr	His	Val	His	Pro	Cys	Ala			
			85					90							

<210> 1773

<211> 393

<212> DNA

<213> Homo sapiens

<400> 1773

accggtgagt tctacgtccc ggtaaccac ctcgagggtg aacaggcgca cctcgacgtc
 60
 ttcgattctc cgcttaacga gtacgcagcg atgggatttg agtacggcta ctctgttgcc
 120
 cgtccggatt ctctggtatt gtgggaagcc caattcggcg atttcaccaa cgggtgccag
 180
 acgatcatcg atgagttcat cgcctcggct ggctccaagt ggggtcagaa gtcgggagtc
 240
 gtgctgctgc tgccgcacgg ttacgaaggt caggggcctg atcactcgtc ggcccgtctg
 300
 gagcgcttcc tcaatctatg cagtgaagac gctttggccg tctgccagcc ctcgaccccg
 360
 gcaagctaca gccatttatt gcgtcagcac gcg
 393

<210> 1774
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 1774
 Thr Gly Glu Phe Tyr Val Pro Val Asn His Leu Gly Gly Glu Gln Ala
 1 5 10 15
 His Leu Asp Val Phe Asp Ser Pro Leu Asn Glu Tyr Ala Ala Met Gly
 20 25 30
 Phe Glu Tyr Gly Tyr Ser Val Ala Arg Pro Asp Ser Leu Val Leu Trp
 35 40 45
 Glu Ala Gln Phe Gly Asp Phe Thr Asn Gly Ala Gln Thr Ile Ile Asp
 50 55 60
 Glu Phe Ile Ala Ser Ala Gly Ser Lys Trp Gly Gln Lys Ser Gly Val
 65 70 75 80
 Val Leu Leu Leu Pro His Gly Tyr Glu Gly Gln Gly Pro Asp His Ser
 85 90 95
 Ser Ala Arg Leu Glu Arg Phe Leu Asn Leu Cys Ser Glu Asp Ala Leu
 100 105 110
 Ala Val Cys Gln Pro Ser Thr Pro Ala Ser Tyr Ser His Leu Leu Arg
 115 120 125
 Gln His Ala
 130

<210> 1775
 <211> 369
 <212> DNA
 <213> Homo sapiens

<400> 1775
 nncctccgag cagctctccg gggcagaccc cagctgcaag ccacagcccc gccctggtaa
 60
 cgggagggca tcgctagggg ggggtggggc ggccccggett cgatgcagcc atgtgggagg
 120
 gccactctca gagaccccc gccttccttg ccacccccac ccagaggggg aagctggagc
 180
 tgggaggctg cagacccagg ccaaggtgtg gccagggctg gctttcttgg gaggctttga
 240
 gcatcctgct tcctggccac ccagctctgg ggctgctgtc aactcttgat ttgtagacat
 300
 cactccagcc tctggcctgt caccctgaac ctcccccatg tctgtgtctt ttctcactgg
 360
 aacaccggt
 369

<210> 1776
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 1776
 Arg Glu Gly Ile Ala Arg Glu Gly Trp Gly Gly Pro Ala Ser Met Gln

```

      1             5             10             15
Pro Cys Gly Arg Ala Thr Leu Arg Asp Pro Pro Pro Ser Leu Pro Pro
      20             25             30
Pro Pro Gln Arg Gly Ser Trp Ser Trp Glu Ala Ala Asp Pro Gly Gln
      35             40             45
Gly Val Ala Arg Ala Gly Phe Leu Gly Arg Leu
      50             55

```

<210> 1777

<211> 370

<212> DNA

<213> Homo sapiens

<400> 1777

```

agcttcttat cactatcctt tagtgctttt tggctacct tagcggtaat gctccatcaa
60
gaatatggtt ttggtagtgc aactgcggga ttttttggcc tcgctgggtgc cgccggagct
120
ttagcagcac cactgtccgg taaactaaca gataaacaag gaccgacacg ggtcacgcag
180
ctgggtgctg ccttagttgt cgtctctttc gcacttatgt tggtattgcc ttacttcagt
240
atcagtaccc aagttataat gattattggt gctaccatag tggttgactt tgggtgttcag
300
gcggcactta ttgctcatca aaccttagtg tataacattg actctaccgc tcgtggagcg
360
cttaacgcgt
370

```

<210> 1778

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1778

```

Ser Phe Leu Ser Leu Ser Phe Ser Ala Phe Trp Ser Thr Leu Ala Val
      1             5             10             15
Met Leu His Gln Glu Tyr Gly Phe Gly Ser Ala Thr Ala Gly Phe Phe
      20             25             30
Gly Leu Ala Gly Ala Ala Gly Ala Leu Ala Ala Pro Leu Ser Gly Lys
      35             40             45
Leu Thr Asp Lys Gln Gly Pro Thr Arg Val Thr Gln Leu Gly Ala Ala
      50             55             60
Leu Val Val Val Ser Phe Ala Ser Met Leu Leu Leu Pro Tyr Phe Ser
      65             70             75             80
Ile Ser Thr Gln Val Ile Met Ile Ile Val Ala Thr Ile Val Phe Asp
      85             90             95
Phe Gly Val Gln Ala Ala Leu Ile Ala His Gln Thr Leu Val Tyr Asn
      100             105             110
Ile Asp Ser Thr Ala Arg Gly Arg Leu Asn Ala
      115             120

```

<210> 1779

<211> 345

<212> DNA
<213> Homo sapiens

<400> 1779
ccatgtgtgt gtatatgctc gtgtgtgatg gatatatat gtgtatatgt gnntatatgt
60
atacacgtgt gttatgggtgt gtatatatgt atatacgtgt gtgtatatat atgtatatgg
120
gtatgtgtgt gcatgtgcgt atgggtgtgt atatgtgtat atatgtagggt gtgtatatct
180
gggaatatat ggggtgtgtat atgtgtgtat aggtttttat atgtggggaa atatttaaac
240
ctgtgtatat tggaatgtgt gtgtatatgt gtgtatatat ggnggtgtgt atgtacatgt
300
atgtgtgtat atatgtgtgt atatacgtag gtgtgcatat gtgtg
345

<210> 1780
<211> 55
<212> PRT
<213> Homo sapiens

<400> 1780
Pro Cys Val Cys Ile Cys Ser Cys Val Met Val Cys Ile Cys Val Tyr
1 5 10 15
Val Xaa Ile Cys Ile His Val Cys Tyr Gly Val Tyr Ile Cys Ile Tyr
20 25 30
Val Cys Val Tyr Ile Cys Ile Trp Val Cys Val Cys Met Cys Val Trp
35 40 45
Val Cys Ile Cys Val Tyr Met
50 55

<210> 1781
<211> 349
<212> DNA
<213> Homo sapiens

<400> 1781
nacgcgtcat gctaaatddd gccctttatg gcaacatttt cgtcagaaca agcggaagag
60
aagctactat ccaagtttca tacgccgggtt aaaagaaaac atgatgatac gagatcatct
120
gatgtgaaca caacgcaaac tggttcaagc gccacgcca ttacacctgt acccttactg
180
cccagtgcac aagagcccag ttatctttgc cagtgggtgcg ctccccagac acgaaagcac
240
aagacatggg aggggtgatgc tattcttata ttgcatggaa ataaaaactac ttgttcgcta
300
cgatccgcac atgatggcag catgctagtg acgaatgctg ccttccgga
349

<210> 1782
<211> 107
<212> PRT

<213> Homo sapiens

<400> 1782

```

Met Ala Thr Phe Ser Ser Glu Gln Ala Glu Glu Lys Leu Leu Ser Lys
 1           5           10           15
Phe His Thr Pro Val Lys Arg Lys His Asp Asp Thr Arg Ser Ser Asp
          20           25           30
Val Asn Thr Thr Gln Thr Gly Ser Ser Ala Thr Pro Ile Thr Pro Val
          35           40           45
Pro Leu Leu Pro Ser Ala Gln Glu Pro Ser Tyr Leu Cys Gln Trp Cys
          50           55           60
Ala Pro Gln Thr Arg Lys His Lys Thr Trp Glu Gly Asp Ala Ile Leu
65           70           75           80
Ile Leu His Gly Asn Lys Thr Thr Cys Ser Leu Arg Ser Ala His Asp
          85           90           95
Gly Ser Met Leu Val Thr Asn Ala Ala Phe Arg
          100           105

```

<210> 1783

<211> 1829

<212> DNA

<213> Homo sapiens

<400> 1783

```

gtgcacgact tgcacgccag cctctcgggc atcgggcagg aactgggcgc cggcgcttac
60
agcatgagtg atgtcttggc attgcccatt ttcaagcagg aagattccag ccttccattg
120
gatggtgaaa cagagcaccc accctttcag tatgtgatgt gtgctgcaac gtcaccagca
180
gtaaaactgc atgatgaaac gcttacttat ttgaaccaag gtcagtcata tgaaattcgg
240
atgtgggata atcggaaaat ggggtgatatg cctgagatca atggaaaatt agtaaagagc
300
atcataaggg ttgtattcca tgacagacgg ctacaatata cagagcatca gcaacttgaa
360
ggatggaagt ggaatcgcgc aggagacaga cttcttgatt tagatattcc aatgtctgtg
420
ggaataattg acacaaggac gaatccaggc cagttaaatt cggttgaatt tctgtgggac
480
ccagcaaaac gcacctctgc tttcattcag gtacactgca tcagcacaga atttactcca
540
cggaagcacg gaggtgaaaa gggagtgcgc tttaggatcc aggttgacac ctttaagcag
600
aatgaaaatg gagaatacac agatcatcta cactcagcta gctgccaaat caaagttttt
660
aagcctaaag gtgcagacag gaaacaaaaa actgaccgag agaagatgga gaagagaaca
720
gctcatgaaa aagaaaagta tcagccgtcc tatgatacca caatcctcac agagatgagg
780
cttgagccta taattgaaga tgcagttgaa catgagcaga aanaagtcca gcaagcggac
840
tttccgcgag actacggtga ttctctggca aagcgaggca gttgttctcc gtggcccgat
900

```

gccccacag cctatgtgaa taacagccct tccccagcgc ccactttcac ctccccacag
 960
 cagagcactt gcagtgtccc agacagcaat tctttctccc caaatcatca gggagatgga
 1020
 gcttcacaga cctctggtga acaaattcag ccttcagcta cgatccagga aacacagcaa
 1080
 tggctgctca aaaacagatt ctcttcttac acaagactgt tctctaattt ttcaggtgcc
 1140
 gacttattaa aactgacaaa ggaggattta gttcaaattt gtggtgcagc cgatggaatt
 1200
 cggtcttata attcactgaa gtcaaggctg gtttagacccc gtttaaccat ctatgtctgc
 1260
 cgggagcagc caagcagcac agtgctgcaa gggcagcagc aagctgcaag cagtgcagc
 1320
 gagaatggca gtggggcacc ctatgtttat catgcaatct acttgggaaga aatgattgcc
 1380
 tcagaagttg ctgaaaaact tgcgctggtg tttaatatcc ctctccacca aattaatcag
 1440
 gtttacagac aggggtccac cggtattcac attcttgta gtgatcaggt aaatcaaate
 1500
 atttgttttt ccttttcaga ctggtattta cttttataca tgtaattgta gaactgtaga
 1560
 aaaattctgt gacctctttt gaaaatactt atgagaatca ttttcagaga gttgggaate
 1620
 actttggaag aacttataac caagagtttc aggcattcta gtgataatat ggaatacaag
 1680
 ccaaggaaaa ctggccttagc ctccccccag cccttttaga tgcagccaat cactggggca
 1740
 ctctagggat agtggcaggc tttggccctt tttatgaggt gagtcactgg atgtgttttc
 1800
 cttttgtcta ttattgatg actaattta
 1829

<210> 1784

<211> 514

<212> PRT

<213> Homo sapiens

<400> 1784

Val	His	Asp	Phe	Asp	Ala	Ser	Leu	Ser	Gly	Ile	Gly	Gln	Glu	Leu	Gly
1				5					10					15	
Ala	Gly	Ala	Tyr	Ser	Met	Ser	Asp	Val	Leu	Ala	Leu	Pro	Ile	Phe	Lys
			20					25					30		
Gln	Glu	Asp	Ser	Ser	Leu	Pro	Leu	Asp	Gly	Glu	Thr	Glu	His	Pro	Pro
		35					40					45			
Phe	Gln	Tyr	Val	Met	Cys	Ala	Ala	Thr	Ser	Pro	Ala	Val	Lys	Leu	His
		50				55				60					
Asp	Glu	Thr	Leu	Thr	Tyr	Leu	Asn	Gln	Gly	Gln	Ser	Tyr	Glu	Ile	Arg
65					70				75					80	
Met	Leu	Asp	Asn	Arg	Lys	Met	Gly	Asp	Met	Pro	Glu	Ile	Asn	Gly	Lys
			85						90					95	
Leu	Val	Lys	Ser	Ile	Ile	Arg	Val	Val	Phe	His	Asp	Arg	Arg	Leu	Gln
			100					105						110	
Tyr	Thr	Glu	His	Gln	Gln	Leu	Glu	Gly	Trp	Lys	Trp	Asn	Arg	Pro	Gly

```

      115      120      125
Asp Arg Leu Leu Asp Leu Asp Ile Pro Met Ser Val Gly Ile Ile Asp
      130      135      140
Thr Arg Thr Asn Pro Gly Gln Leu Asn Ala Val Glu Phe Leu Trp Asp
      145      150      155      160
Pro Ala Lys Arg Thr Ser Ala Phe Ile Gln Val His Cys Ile Ser Thr
      165      170      175
Glu Phe Thr Pro Arg Lys His Gly Gly Glu Lys Gly Val Pro Phe Arg
      180      185      190
Ile Gln Val Asp Thr Phe Lys Gln Asn Glu Asn Gly Glu Tyr Thr Asp
      195      200      205
His Leu His Ser Ala Ser Cys Gln Ile Lys Val Phe Lys Pro Lys Gly
      210      215      220
Ala Asp Arg Lys Gln Lys Thr Asp Arg Glu Lys Met Glu Lys Arg Thr
      225      230      235      240
Ala His Glu Lys Glu Lys Tyr Gln Pro Ser Tyr Asp Thr Thr Ile Leu
      245      250      255
Thr Glu Met Arg Leu Glu Pro Ile Ile Glu Asp Ala Val Glu His Glu
      260      265      270
Gln Lys Xaa Val Gln Gln Ala Asp Phe Ala Ala Asp Tyr Gly Asp Ser
      275      280      285
Leu Ala Lys Arg Gly Ser Cys Ser Pro Trp Pro Asp Ala Pro Thr Ala
      290      295      300
Tyr Val Asn Asn Ser Pro Ser Pro Ala Pro Thr Phe Thr Ser Pro Gln
      305      310      315      320
Gln Ser Thr Cys Ser Val Pro Asp Ser Asn Ser Ser Ser Pro Asn His
      325      330      335
Gln Gly Asp Gly Ala Ser Gln Thr Ser Gly Glu Gln Ile Gln Pro Ser
      340      345      350
Ala Thr Ile Gln Glu Thr Gln Gln Trp Leu Leu Lys Asn Arg Phe Ser
      355      360      365
Ser Tyr Thr Arg Leu Phe Ser Asn Phe Ser Gly Ala Asp Leu Leu Lys
      370      375      380
Leu Thr Lys Glu Asp Leu Val Gln Ile Cys Gly Ala Ala Asp Gly Ile
      385      390      395      400
Arg Leu Tyr Asn Ser Leu Lys Ser Arg Ser Val Arg Pro Arg Leu Thr
      405      410      415
Ile Tyr Val Cys Arg Glu Gln Pro Ser Ser Thr Val Leu Gln Gly Gln
      420      425      430
Gln Gln Ala Ala Ser Ser Ala Ser Glu Asn Gly Ser Gly Ala Pro Tyr
      435      440      445
Val Tyr His Ala Ile Tyr Leu Glu Glu Met Ile Ala Ser Glu Val Ala
      450      455      460
Arg Lys Leu Ala Leu Val Phe Asn Ile Pro Leu His Gln Ile Asn Gln
      465      470      475      480
Val Tyr Arg Gln Gly Pro Thr Gly Ile His Ile Leu Val Ser Asp Gln
      485      490      495
Val Asn Gln Ile Ile Cys Phe Ser Phe Ser Asp Trp Tyr Leu Leu Leu
      500      505      510
Tyr Met

```

<210> 1785

<211> 381

<212> DNA

<213> Homo sapiens

<400> 1785

atcacggacg cagaggagaa agggctgatt actccaggcg tgagtgttct gattgaacca
 60
 actagcggca acacagggcat tggactggcc tttatggctg ctgccaaggg ctacaaactt
 120
 acactcaciaa tgcctgcctc catgagcatg gagaggagga tcatattgaa ggcttttggt
 180
 gctgaacttg tccttactga cccactcttg ggaatgaaag gagctgtcaa gaaagcggaa
 240
 gagatacaag caaagacacc caactcgtac atccttcaac aatttgaaaa tccagctaac
 300
 ccaaagattc actatgagac tactgggcct gaaatctgga aagctacagc aggaaaaatt
 360
 gatggccttg tatctggtat c
 381

<210> 1786

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1786

Ile	Thr	Asp	Ala	Glu	Glu	Lys	Gly	Leu	Ile	Thr	Pro	Gly	Val	Ser	Val
1				5				10					15		
Leu	Ile	Glu	Pro	Thr	Ser	Gly	Asn	Thr	Gly	Ile	Gly	Leu	Ala	Phe	Met
			20					25					30		
Ala	Ala	Ala	Lys	Gly	Tyr	Lys	Leu	Thr	Leu	Thr	Met	Pro	Ala	Ser	Met
		35					40					45			
Ser	Met	Glu	Arg	Arg	Ile	Ile	Leu	Lys	Ala	Phe	Gly	Ala	Glu	Leu	Val
	50					55				60					
Leu	Thr	Asp	Pro	Leu	Leu	Gly	Met	Lys	Gly	Ala	Val	Lys	Lys	Ala	Glu
65				70					75					80	
Glu	Ile	Gln	Ala	Lys	Thr	Pro	Asn	Ser	Tyr	Ile	Leu	Gln	Gln	Phe	Glu
			85					90						95	
Asn	Pro	Ala	Asn	Pro	Lys	Ile	His	Tyr	Glu	Thr	Thr	Gly	Pro	Glu	Ile
			100					105					110		
Trp	Lys	Ala	Thr	Ala	Gly	Lys	Ile	Asp	Gly	Leu	Val	Ser	Gly	Ile	
		115					120					125			

<210> 1787

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1787

gtgcacacag caattcaata tgccaagaca ccagggttgca gcagagaaag atttaattgt
 60
 agggtcacct aacaaggaga tgagaacaaa ctttaaactct atctctctaa ggaatttgga
 120
 cttcgggttt ttaagggtta gaatgggcca aaacatggac attattgatt ggtcaaagag
 180

tacagggtca tggaacctgg agatgaaaaa gccatattct catgctgac ctgttcctct
 240
 gtggaaggtc ttcaaattgg ttgccggaat aaaagatctg tcaaacatct tagg
 294

<210> 1788
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1788
 Met Pro Arg His Gln Val Ala Ala Glu Lys Asp Leu Ile Val Gly Ser
 1 5 10 15
 Pro Asn Lys Glu Met Arg Thr Asn Phe Lys Ser Ile Ser Leu Arg Asn
 20 25 30
 Leu Asp Phe Gly Phe Leu Arg Phe Arg Met Gly Gln Asn Met Asp Ile
 35 40 45
 Ile Asp Trp Ser Lys Ser Thr Gly Ser Trp Asn Leu Glu Met Lys Lys
 50 55 60
 Pro Tyr Ser His Ala Asp Pro Val Pro Leu Trp Lys Val Phe Lys Leu
 65 70 75 80
 Val Ala Gly Ile Lys Asp Leu Ser Asn Ile Leu
 85 90

<210> 1789
 <211> 353
 <212> DNA
 <213> Homo sapiens

<400> 1789
 ttccacata caccacgcg gcatgtcctg acagagatgc acaccctag cacatattca
 60
 cacacacaga catgccacac cccgccatcc cccacactc gtacacgccc accaccctc
 120
 gcaggcacac atgcacacac gcgcgcgcac acgcacacac acccccagcc cggaccggcc
 180
 gacctgtcc ccgggggtctc tcccgcaggc aggtctctctc gccgagtctc cgaaaagggg
 240
 cggtcgtggc ggccctggcg cccagctggg caacgcttcg tggatatctca ccgcttctct
 300
 ctgttggtgcc cagcgccccg actgaagatc cggatcttca gtccttggcg cgc
 353

<210> 1790
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 1790
 Met His Thr Pro Ser Thr Tyr Ser His Thr Gln Thr Cys His Thr Pro
 1 5 10 15
 Pro Ser Pro His Thr Arg Thr Arg Pro Pro Pro Leu Ala Gly Thr His
 20 25 30
 Ala His Thr Arg Ala His Thr His Thr His Pro Gln Pro Gly Pro Ala

```

          35          40          45
Asp Leu Leu Pro Gly Val Ser Pro Ala Gly Arg Ser Pro Arg Arg Val
   50          55          60
Ser Glu Lys Gly Arg Ser Trp Arg Pro Trp Arg Pro Ala Gly Gln Arg
   65          70          75          80
Phe Val Val Ser His Arg Phe Ser Leu Leu Cys Pro Ala Pro Arg Leu
          85          90          95
Lys Ile Arg Ile Phe Ser Pro Trp Arg
          100          105

```

<210> 1791
 <211> 355
 <212> DNA
 <213> Homo sapiens

```

<400> 1791
aaatttcagt tagagattag ggaaaataaa gatgttattt tttcccatcc tagtttacag
60
accccccaga aaccactca tggattctcc cgagtctttg gacctggctc agacaccctt
120
gctttggatc aagccaatgc atgtatcccc taacacacccc atgctttatg tggtccttgc
180
ccctccctgc tcaggggact gcttggttaac ttcattgggt tggggacata tatattatag
240
gagagagaca gagaaaaaga aagagaggaa atgttattct ccttgtctgt atctgtatct
300
ccactccgat tccattccc tctgtgctc tctctctct cctcccttca cgcgt
355

```

<210> 1792
 <211> 108
 <212> PRT
 <213> Homo sapiens

```

<400> 1792
Met Leu Phe Phe Pro Ile Leu Val Tyr Arg Pro Pro Arg Asn Pro Leu
  1          5          10          15
Met Asp Ser Pro Glu Ser Leu Asp Leu Ala Gln Thr Pro Leu Leu Trp
          20          25          30
Ile Lys Pro Met His Val Ser Pro Asn Thr Pro Met Leu Tyr Val Val
          35          40          45
Pro Ala Pro Pro Cys Ser Gly Asp Cys Leu Leu Thr Ser Leu Gly Trp
          50          55          60
Gly His Ile Tyr Tyr Arg Arg Glu Thr Glu Lys Lys Lys Glu Arg Lys
   65          70          75          80
Cys Tyr Ser Pro Cys Leu Tyr Leu Tyr Leu His Ser Asp Ser His Ser
          85          90          95
Leu Cys Cys Ser Pro Leu Ser Pro Pro Phe Thr Arg
          100          105

```

<210> 1793
 <211> 510
 <212> DNA
 <213> Homo sapiens

<400> 1793
 tgggttccag cccgtagatg accttggcct gggaggcctt ccgaaggcca cacccatata
 60
 cccccctcg gagctcctcg cttaccagtc gcccaaagag cttgtccccc cagcagccag
 120
 agtcagccag acccttagca aacaccatag gggtcatttc aatctcttct ccaacttcac
 180
 cttcttctct ggagatgaat cctgacaaca cctcagggtt gaggcagaag tcggtggagg
 240
 ccgagccgtg ctcatgtgg atggtgcacc gatacacacc gcagtctacg ggggaggcct
 300
 gcaagatggc caaggccgcc ggcccctcat cccctgcgtt cctgcccacc tcgcccactg
 360
 ggcgctgac cttggcccat gtcaagactg agtcactaag aatgttgaaa aactggcacc
 420
 acagcttcag gctaccggag gcatcaggaa actgctccac ccgaatcttc cggatcacct
 480
 gtggggcttt cagcaggtct ttggctttcc
 510

<210> 1794
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 1794
 Met Thr Leu Ala Trp Glu Ala Phe Arg Arg Pro His Pro Tyr Pro Pro
 1 5 10 15
 Pro Arg Ser Ser Ser Leu Thr Ser Arg Pro Lys Ser Leu Ser Pro Gln
 20 25 30
 Gln Pro Glu Ser Ala Arg Pro Leu Ala Asn Thr Ile Gly Val Ile Ser
 35 40 45
 Ile Ser Ser Pro Thr Ser Pro Ser Ser Leu Glu Met Asn Pro Asp Asn
 50 55 60
 Thr Ser Gly Leu Arg Gln Lys Ser Val Glu Ala Glu Pro Cys Ser Leu
 65 70 75 80
 Trp Met Val His Arg Tyr Thr Pro Gln Ser Thr Gly Glu Ala Cys Thr
 85 90 95
 Met Ala Lys Ala Ala Gly Pro Ser Ser Pro Ala Leu Leu Pro Thr Ser
 100 105 110
 Pro Thr Gly Arg
 115

<210> 1795
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 1795
 ctatgctctg agtcacttct ccaagcattc ctttctgttc ttccttccct gggctgatca
 60
 tttcaagaag tcctacattc cagaaaactt gagaggtgct tcttctctgg aagccccctt
 120

tcttttctgt gagctcaggg agcattctac atacctcagc tgtgtctgct atcttttctgt
 180
 taattatcaa tctttccata taaacagtaa aggaccacag tttattcatc agattcccca
 240
 tccaaacctg cacctgcata cataaacgca ctggataaat gtaccgcagt agacagaggg
 300
 tctccaggtt gagagctcca tgagggcacc aatttttctc tgtttagctg tgtcctcaaa
 360
 gcaaggaagg gttgatccgg tctaga
 386

<210> 1796

<211> 86

<212> PRT

<213> Homo sapiens

<400> 1796

Met	Gln	Val	Gln	Val	Trp	Met	Gly	Asn	Leu	Met	Asn	Lys	Leu	Trp	Ser
1			5					10					15		
Phe	Thr	Val	Tyr	Met	Glu	Arg	Leu	Ile	Lys	Gln	Lys	Ile	Ala	Asp	
		20					25					30			
Thr	Ala	Glu	Val	Cys	Arg	Met	Leu	Pro	Glu	Leu	Thr	Glu	Lys	Lys	Arg
		35					40					45			
Gly	Phe	Gln	Arg	Arg	Ser	Thr	Ser	Gln	Val	Phe	Trp	Asn	Val	Gly	Leu
	50					55				60					
Leu	Glu	Met	Ile	Ser	Pro	Gly	Lys	Glu	Glu	Gln	Lys	Gly	Met	Leu	Gly
65					70					75				80	
Glu	Val	Thr	Gln	Ser	Ile										
					85										

<210> 1797

<211> 348

<212> DNA

<213> Homo sapiens

<400> 1797

aagcttcact atgttgccca ttccatgggc ggcgtgctgg tgcgtgacct gctggcggac
 60
 cggaatttgc cgatgtcatt gatcaggtca tctgtctggg ctgcccgcag cagggctcgc
 120
 gtgcccgttaa tttgttggcg ccatttgctg gcgccgcac cgtcaaatgg tgtatcacag
 180
 cgactatgtg atgccgcttg cgcccacgcc cggcagcgcg cgttggagcg ccatcaactc
 240
 acagatggac aacctggtgt tgccggtgac ctccgcaatt ttaccgggaa tgacccatgt
 300
 ggcggtggat tacctggggc attgttcggt attgtacagc ccacgcgt
 348

<210> 1798

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1798

```

Met Gly Gly Val Leu Val Arg Asp Leu Leu Ala Asp Arg Asn Leu Pro
 1           5           10           15
Met Ser Leu Ile Arg Ser Ser Val Trp Ala Arg Arg Ser Arg Ala Arg
          20           25           30
Val Pro Leu Ile Cys Trp Arg His Leu Leu Ala Ala His Pro Ser Asn
          35           40           45
Gly Val Ser Gln Arg Leu Cys Asp Ala Ala Cys Ala His Ala Arg Gln
          50           55           60
Arg Ala Leu Glu Arg His Gln Leu Thr Asp Gly Gln Pro Gly Val Ala
65           70           75           80
Gly Asp Leu Gly Asn Phe Thr Gly Asn Asp Pro Cys Gly Gly Gly Leu
          85           90           95
Pro Gly Ala Leu Phe Val Ile Val Gln Pro Thr Arg
          100           105

```

<210> 1799

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1799

```

acgcgtcgcc tcctgctggt cgggattttc cttgctgtag ttaaccaaac caccggcgtc
60
aataccgtca tgtattacgc gcccaagggtg ttggagttcg caggaatgag caccagggcg
120
tcgattatct cagaggtggc taatggagtc atgtctgtta ttggtgccgc tgcaggcttg
180
tggctcatcg aacggtttga tcgtcgtcac ctgcttatct tcgatgtcac ggcggtcggt
240
gtgtgtctcc ttggtattgc ggctactttc gggctggcaa ttgctcctca tgtgggtcaa
300
ggggtaccga agtgggcgcc tattctcgtg ctgctcctga tgagtatctt catgcttacc
360
gtgcac
366

```

<210> 1800

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1800

```

Thr Arg Arg Leu Leu Val Gly Ile Phe Leu Ala Val Val Asn Gln
 1           5           10           15
Thr Thr Gly Val Asn Thr Val Met Tyr Tyr Ala Pro Lys Val Leu Glu
          20           25           30
Phe Ala Gly Met Ser Thr Gln Ala Ser Ile Ile Ser Glu Val Ala Asn
          35           40           45
Gly Val Met Ser Val Ile Gly Ala Ala Ala Gly Leu Trp Leu Ile Glu
          50           55           60
Arg Phe Asp Arg Arg His Leu Leu Ile Phe Asp Val Thr Ala Val Gly
65           70           75           80
Val Cys Leu Leu Gly Ile Ala Ala Thr Phe Gly Leu Ala Ile Ala Pro

```

```

      85              90              95
His Val Gly Gln Gly Val Pro Lys Trp Ala Pro Ile Leu Val Leu Val
      100              105              110
Leu Met Ser Ile Phe Met Leu Ile Val His
      115              120

```

<210> 1801
 <211> 597
 <212> DNA
 <213> Homo sapiens

```

<400> 1801
aatttctcct tcggtgacta cttcaagaac gaggccattc agtacgcatg ggagctcgtc
60
actaagccgg cagaacaggg cggattgggt ttcgacccg ccagcatctg ggtgacggtc
120
cttggacctg ggtttcaccc tgactatccg gagggcgaca ttgaggcgcg cgaggcgtgg
180
cgtgctgcgg gtatccctga cgagcagatt cagggtcgct cccttaagga caactactgg
240
catatggggg ttcccggccc cggcggcccg tgctcggaaa tctacatcga tcgtggccca
300
gcctatggtc ccgacggtgg tccagaagca gatgaggacc gttaccttga gatctggaac
360
ctcgtattcg agaccgagga tctctcagcg gtgcgcgcta aagatgactt cgacatcgca
420
ggccattg cgcgccttaa catcgacact ggtgccggtc tcgaacgtat tgcctaccta
480
ctccagggcg tcgacaatat gtacgagact gaccaggtat tccctgtcat tgagaaagcg
540
tccgagatgt cgggcaagcg gtacggcggt cgccacgacg acgacgtccg actacgc
597

```

<210> 1802
 <211> 199
 <212> PRT
 <213> Homo sapiens

```

<400> 1802
Asn Phe Ser Phe Gly Asp Tyr Phe Lys Asn Glu Ala Ile Gln Tyr Ala
1      5      10      15
Trp Glu Leu Val Thr Lys Pro Ala Glu Gln Gly Gly Leu Gly Phe Asp
20     25     30
Pro Ala Ser Ile Trp Val Thr Val Leu Gly Pro Gly Phe His Pro Asp
35     40     45
Tyr Pro Glu Gly Asp Ile Glu Ala Arg Glu Ala Trp Arg Ala Ala Gly
50     55     60
Ile Pro Asp Glu Gln Ile Gln Gly Arg Ser Leu Lys Asp Asn Tyr Trp
65     70     75     80
His Met Gly Val Pro Gly Pro Gly Gly Pro Cys Ser Glu Ile Tyr Ile
85     90     95
Asp Arg Gly Pro Ala Tyr Gly Pro Asp Gly Gly Pro Glu Ala Asp Glu
100    105    110
Asp Arg Tyr Leu Glu Ile Trp Asn Leu Val Phe Glu Thr Glu Asp Leu

```

```

          115          120          125
Ser Ala Val Arg Ala Lys Asp Asp Phe Asp Ile Ala Gly Pro Leu Arg
   130          135          140
Ser Leu Asn Ile Asp Thr Gly Ala Gly Leu Glu Arg Ile Ala Tyr Leu
145          150          155          160
Leu Gln Gly Val Asp Asn Met Tyr Glu Thr Asp Gln Val Phe Pro Val
          165          170          175
Ile Glu Lys Ala Ser Glu Met Ser Gly Lys Arg Tyr Gly Val Arg His
          180          185          190
Asp Asp Asp Val Arg Leu Arg
          195

```

<210> 1803

<211> 708

<212> DNA

<213> Homo sapiens

<400> 1803

```

cccacaacga tggccgcat ggtggatggg gaagtgcctg aggaggtcac acctaaggac
60
ctcatccttg ccctcatctc cgagatcggc accggtgggg gacaagggtca tatggtcgag
120
tatcgcgggc aggccatcga gaagatgtcg atggagggtc gcatgacgat ctgcaatatg
180
tcgattgagt ggggagctcg cgtcggcatg gttgcttctg atgagaccac cttcacctac
240
ctcaaggatc gtccgcacgc tccgcgtggt gcacagtggg acaaggctgt cgcgctactgg
300
cgactctgc gtactgacga cgatgcgacc tttgacgtg agatccatgt ggacgcctcg
360
aatctcgccc ccttcgttac ctgggggtacc aaccgggggc agggatcccc cctaggcggt
420
gtggtgccgg ccgtcgaaga ctttgaggac gaggtagctc gcagcgcagc gtttgaggta
480
catggatttg accccgacga gatcggttcc cggtttgctg acatctttcg caataactct
540
gcgaacaacg gcttgttact ggctcagggt gatcccaagg tcgtcggaga gttgtgggac
600
tttgccgagc agcatcctgg tgagcagctc accctctccc tcgagaatcg gacgattaac
660
cttcggggtc gcacgacctc cccgttccat attgatgacg tcacgcgt
708

```

<210> 1804

<211> 236

<212> PRT

<213> Homo sapiens

<400> 1804

```

Pro Thr Thr Met Ala Val Met Val Asp Gly Glu Val Pro Glu Glu Val
  1          5          10          15
Thr Pro Lys Asp Leu Ile Leu Ala Leu Ile Ser Glu Ile Gly Thr Gly
          20          25          30
Gly Gly Gln Gly His Met Val Glu Tyr Arg Gly Glu Ala Ile Glu Lys

```

1404

ctggaagggtt cgatcgccgt cgctggatcg ctggtacagt ggctgcgcga caacctcaag
 720
 atgttcgaga ccgccccgca aatcgaagcc ctgcgaaca ccgtcgagga caatgggtggc
 780
 gcctactttg tgccggcctt ctctggcctg ttgcgcgcgt actggcgctcc gga
 833

<210> 1806
 <211> 277
 <212> PRT
 <213> Homo sapiens

<400> 1806
 Xaa Ala Val Val Trp Asp Lys Asn Thr Gly Glu Pro Val Tyr Asn Ala
 1 5 10 15
 Ile Val Trp Gln Asp Thr Arg Thr Gln Lys Ile Cys Asn Glu Leu Ala
 20 25 30
 Gly Asp Lys Gly Ala Asp Arg Tyr Lys Glu Ile Cys Gly Leu Gly Leu
 35 40 45
 Ser Thr Tyr Phe Ser Gly Pro Lys Val Lys Trp Ile Leu Asp Asn Val
 50 55 60
 Glu Gly Ala Arg Ala Arg Ala Glu Ala Gly Asp Leu Leu Phe Gly Asn
 65 70 75 80
 Met Asp Thr Trp Val Leu Trp Asn Leu Thr Gly Gly Thr Asn Gly Gly
 85 90 95
 Val His Ile Thr Asp Pro Thr Asn Ala Ser Arg Thr Met Leu Met Asp
 100 105 110
 Val Arg Lys Leu Gln Trp Asp Asp Ser Met Cys Glu Val Met Gly Ile
 115 120 125
 Pro Lys Ser Met Leu Pro Glu Ile Lys Ser Ser Ser Glu Ile Tyr Gly
 130 135 140
 Tyr Gly Arg Lys Asn Gly Leu Leu Ile Asp Thr Pro Ile Ser Gly Ile
 145 150 155 160
 Leu Gly Asp Gln Gln Ala Ala Thr Phe Gly Gln Ala Cys Phe Gln Lys
 165 170 175
 Gly Met Ala Lys Asn Thr Tyr Gly Thr Gly Cys Phe Met Leu Met Asn
 180 185 190
 Thr Gly Glu Glu Ala Ile Phe Ser Glu Asn Gly Leu Leu Thr Thr Val
 195 200 205
 Cys Tyr Lys Ile Gly Asp Gln Pro Thr Val Tyr Ala Leu Glu Gly Ser
 210 215 220
 Ile Ala Val Ala Gly Ser Leu Val Gln Trp Leu Arg Asp Asn Leu Lys
 225 230 235 240
 Met Phe Glu Thr Ala Pro Gln Ile Glu Ala Leu Ala Asn Thr Val Glu
 245 250 255
 Asp Asn Gly Gly Ala Tyr Phe Val Pro Ala Phe Ser Gly Leu Phe Ala
 260 265 270
 Pro Tyr Trp Arg Pro
 275

<210> 1807
 <211> 420
 <212> DNA
 <213> Homo sapiens

<400> 1807
 nnntatcggc aaggtggctg aaatggctct tgactatgtc aacggtgaca cgtgcgccgc
 60
 gaccgccccca ttcatttgtc gtttgacgtc gacgcgatgg accctagcgt ggccccgagc
 120
 acaggcacac cgggtgcgtg tgggtctcaca ttccgagaag gccactacat atgcgagggc
 180
 gtagctgaga cgggctcgtt ggtggctatg gatatggtag aagtcaaccc ccatcttgaa
 240
 aagcatgcgg ctgagcagac gatcgccgtg gggtgttccc tcattcgttc ggcgctgggg
 300
 gagacgcttc tgtaatgggt gcatgatggg ccgggtggctc atagccatgc atagacactc
 360
 cgggcgctga tatgatgagt gacatagcac gtacgataaa ttcggtttt gagcacgcgt
 420

<210> 1808
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 1808
 His Val Arg Arg Asp Arg Pro Ile His Leu Ser Phe Asp Val Asp Ala
 1 5 10 15
 Met Asp Pro Ser Val Ala Pro Ser Thr Gly Thr Pro Val Arg Gly Gly
 20 25 30
 Leu Thr Phe Arg Glu Gly His Tyr Ile Cys Glu Ala Val Ala Glu Thr
 35 40 45
 Gly Ser Leu Val Ala Met Asp Met Val Glu Val Asn Pro His Leu Glu
 50 55 60
 Lys His Ala Ala Glu Gln Thr Ile Ala Val Gly Cys Ser Leu Ile Arg
 65 70 75 80
 Ser Ala Leu Gly Glu Thr Leu Leu
 85

<210> 1809
 <211> 340
 <212> DNA
 <213> Homo sapiens

<400> 1809
 nnaccggtga tcgcatcggg gagcctcggc gcgatgcgcg tggtcgacct tcgccatcgc
 60
 cagaccggtg tcacgcatgc gtatcgcttc gggcatggca gcctcctcgt gatgcggggc
 120
 cccacccagg ccgaatggca gcatcgctg ccgaaagcgc cgggtgtgca gggcgagcgc
 180
 gtgaacctga cgtttcggcg cgtgatgccg gtcggtatgg gccggtaaca accggcgctc
 240
 ccgaggtgcc cggatcgccg ggcgattcgc gcccgtttt cgcgattcat gcgcgatcga
 300
 tacgggcagg cggtcgcatg tgcggcacgt tgccgcacgn
 340

<210> 1810
 <211> 75
 <212> PRT
 <213> Homo sapiens

<400> 1810
 Xaa Pro Val Ile Ala Ser Val Ser Leu Gly Ala Met Arg Val Phe Asp
 1 5 10 15
 Leu Arg His Arg Gln Thr Gly Val Thr His Ala Tyr Arg Leu Gly His
 20 25 30
 Gly Ser Leu Leu Val Met Arg Gly Pro Thr Gln Ala Glu Trp Gln His
 35 40 45
 Arg Val Pro Lys Ala Pro Gly Val Gln Gly Glu Arg Val Asn Leu Thr
 50 55 60
 Phe Arg Arg Val Met Pro Val Gly Met Gly Arg
 65 70 75

<210> 1811
 <211> 500
 <212> DNA
 <213> Homo sapiens

<400> 1811
 nnacgcgtgc taggaatagc catggactca tcatcagata catgctggat ttatacttca
 60
 ctgggtggat tgtatgagct gctcgtaaaa gatgaggctc gcgatatgtg gcatttgttg
 120
 ctgaaacggt gcgactttga gaaggcacta acattttgtc gtgatgagac gtgtcggaag
 180
 caggtactgg aaaagaaggg cgatgcactg ctacacgcag gtcagctcat ggaggccgct
 240
 gagtgcctatg ctcaggccca gacaccggcc tttgaacagg ttgtgctttc tttgatggac
 300
 gtctgtgccg acaaggcatt gcgtcgatat gtcagactgc gtctcgaaa gatgccgaaa
 360
 caagctcgcg tgccctcgtc catgctggct acttggtca ttgaattgta tgtggccgcc
 420
 attcaagcgc atgaaccac ctccgaacat tatcagacac ttttgctgga agcccaggag
 480
 acacttgagc ggcacatga
 500

<210> 1812
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 1812
 Xaa Arg Val Leu Gly Ile Ala Met Asp Ser Ser Ser Asp Thr Cys Trp
 1 5 10 15
 Ile Tyr Thr Ser Leu Gly Gly Leu Tyr Glu Leu Leu Val Lys Asp Glu
 20 25 30
 Ala Arg Asp Met Trp His Leu Leu Leu Lys Arg Cys Asp Phe Glu Lys

```

      35              40              45
Ala Leu Thr Phe Cys Arg Asp Glu Thr Cys Arg Lys Gln Val Leu Glu
      50              55              60
Lys Lys Gly Asp Ala Leu Leu His Ala Gly Gln Leu Met Glu Ala Val
65              70              75              80
Glu Cys Tyr Ala Gln Ala Gln Thr Pro Ala Phe Glu Gln Val Val Leu
      85              90              95
Ser Leu Met Asp Val Cys Ala Asp Lys Ala Leu Arg Arg Tyr Val Arg
      100             105             110
Leu Arg Leu Asp Lys Met Pro Lys Gln Ala Arg Val Pro Arg Leu Met
      115             120             125
Leu Ala Thr Trp Leu Ile Glu Leu Tyr Val Ala Ala Ile Gln Ala His
      130             135             140
Glu Pro Thr Ser Glu His Tyr Gln Thr Leu Leu Leu Glu Ala Gln Glu
145             150             155             160
Thr Leu Glu Arg His His
      165

```

<210> 1813

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1813

```

tctagagccg ttgtgatcgg tatccatggt tggatgggggt tcatctcgat ggaggagtgt
60
gtcctgaggg gtggcagtga cctggtagggt gtgcctgcgg cgtcgcggct tgcgatcgct
120
ggttctcggg gatgactctc ggatgaatat agatctgcta agacgtcatt agattcgctt
180
ggcgcttggt tgggaacggg tgtgaagcag ccttctgatg gatgtatttt tgcgttggtg
240
aataaggttt caatattaat tgaatatggc gctagatgct ggtttaggat cagttgacgt
300
cgcgtgtaga tcctccctat ggtcattctg gggccaggcg cttcgccagc tggccatcgc
360
aacaatggtg tggcgaagggt ttatgaggtg agtatggctg agcaagtcgt tggacaggcg
420
tctaca
426

```

<210> 1814

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1814

```

Met Thr Ile Gly Arg Ile Tyr Ser Gly Arg Gln Leu Ile Leu Asn Gln
  1              5              10              15
His Leu Ala Pro Tyr Ser Ile Asn Ile Glu Thr Leu Phe Asn Asn Ala
      20              25              30
Lys Ile His Pro Ser Glu Gly Cys Phe Thr Pro Val Pro Asn Gln Ala
      35              40              45
Pro Ser Glu Ser Asn Asp Val Leu Ala Asp Leu Tyr Ser Ser Glu Ser

```

```

      50      55      60
His Pro Arg Glu Pro Ala Ile Ala Ser Arg Asp Ala Ala Gly Thr Pro
65      70      75      80
Thr Arg Ser Leu Pro Pro Leu Arg Thr His Ser Ser Ile Glu Met Asn
      85      90      95
Pro Ile Gln Pro Trp Ile Pro Ile Thr Thr Ala Leu
      100      105

```

<210> 1815
 <211> 303
 <212> DNA
 <213> Homo sapiens

```

<400> 1815
ggcgcccaca tggctacgct cgcaccgcgg cacaaggtaa gccgtagcgg cgggatcgag
60
cgccaggccg cgcattctcg catggagcgc gatcagttcg gccatcatcg cgtcgtcggg
120
cgtgccgata tcgaggggca acgccgcgcc gagccgcgaa gccagatcgg gcagcgcgat
180
ccgccagcca tcggcaaatt cgcgagtgat gacgagcaag ggccgcctgg tctcctgcgc
240
ccggttccag cagtggaaca cgttcgcctc gggcagacgg gcggcatcgg cgatcacggt
300
acc
303

```

<210> 1816
 <211> 98
 <212> PRT
 <213> Homo sapiens

```

<400> 1816
Met Ala Thr Leu Ala Pro Arg His Lys Val Ser Arg Ser Gly Gly Ile
1      5      10      15
Glu Arg Gln Ala Ala His Leu Gly Met Glu Arg Asp Gln Phe Gly His
20      25      30
His Arg Val Val Gly Arg Ala Asp Leu Glu Gly Gln Arg Arg Ala Glu
35      40      45
Pro Arg Ser Gln Ile Gly Gln Arg Asp Pro Pro Ala Ile Gly Lys Phe
50      55      60
Ala Ser Asp Asp Glu Gln Gly Pro Pro Gly Leu Leu Arg Pro Val Pro
65      70      75      80
Ala Val Glu His Val Arg Leu Gly Gln Thr Gly Gly Ile Gly Asp His
85      90      95
Gly Thr

```

<210> 1817
 <211> 413
 <212> DNA
 <213> Homo sapiens

<400> 1817

nncagcttgc aagaccgagg ccacacagtg tacatcttaa catcacattt cgatgcgtcg
 60
 catgcgtttg agcccacacg cgatggcaca cttcagggtca ttcacgcaaa gacatggatc
 120
 ccgcgctcct tatttcacat gctgcatctg cgatggccat tcgcagcagt tttttctctt
 180
 gtgatgcagg tcgtggtagc agcgtatgga tcgtcactcg caccgcaact gccgcatgtg
 240
 tacagggcgt gacgcatgtc ccgtcaaaact cgctcccaga cgtgtttgtt attgaccaac
 300
 ttccagcagc gataccccta atcaaaactcc tgtgtgggag cgtgtgcatg tactactgtc
 360
 acttccctga caaagaaatc agcgtgtgtc tggctcgaca gcgaggcacg cgt
 413

<210> 1818
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 1818
 Xaa Ser Leu Gln Asp Arg Gly His Thr Val Tyr Ile Leu Thr Ser His
 1 5 10 15
 Phe Asp Ala Ser His Ala Phe Glu Pro Thr Arg Asp Gly Thr Leu Gln
 20 25 30
 Val Ile His Ala Lys Thr Trp Ile Pro Arg Ser Leu Phe His Met Leu
 35 40 45
 His Leu Arg Trp Pro Phe Ala Val Phe Ser Leu Val Met Gln Val
 50 55 60
 Val Val Ala Ala Tyr Gly Ser Ser Leu Ala Arg His Leu Pro His Val
 65 70 75 80
 Tyr Arg Ala

<210> 1819
 <211> 343
 <212> DNA
 <213> Homo sapiens

<400> 1819
 ggatccaaga gtggggcatc aggaacatgc catggttgtc gtggtgctgg aatgagaaca
 60
 atcacaagac agataggcct tggcatgac caacagatga acactgtttg ccctgaatgc
 120
 aaaggatcag gtgagatcat aagtgacaag gacaaatgcc caagctgtaa aggaacaaaa
 180
 gtagtccagg agaagaaggt gtagagggt catgtggaga aaggaatgca acataaccaa
 240
 aagattgtat tccaggggtc ggctgatgaa gctcctgata cgggtacagg agacattgtt
 300
 tttgtcttgc aacttaaaga ccattcaaaa tttaagagga tgt
 343

<210> 1820

<211> 114
 <212> PRT
 <213> Homo sapiens

<400> 1820
 Gly Ser Lys Ser Gly Ala Ser Gly Thr Cys His Gly Cys Arg Gly Ala
 1 5 10 15
 Gly Met Arg Thr Ile Thr Arg Gln Ile Gly Leu Gly Met Ile Gln Gln
 20 25 30
 Met Asn Thr Val Cys Pro Glu Cys Lys Gly Ser Gly Glu Ile Ile Ser
 35 40 45
 Asp Lys Asp Lys Cys Pro Ser Cys Lys Gly Asn Lys Val Val Gln Glu
 50 55 60
 Lys Lys Val Leu Glu Val His Val Glu Lys Gly Met Gln His Asn Gln
 65 70 75 80
 Lys Ile Val Phe Gln Gly Gln Ala Asp Glu Ala Pro Asp Thr Gly Thr
 85 90 95
 Gly Asp Ile Val Phe Val Leu Gln Leu Lys Asp His Pro Lys Phe Lys
 100 105 110
 Arg Met

<210> 1821
 <211> 285
 <212> DNA
 <213> Homo sapiens

<400> 1821
 aagcttgagt tcagcaagat cttggaggct attaaggcaa acttcaacga caagttcgat
 60
 gaggtcggga agaagtgggg aggtggcatc atgggatcca agtcgcaggg caagaccaag
 120
 gcccgggaaa agttgctcgc caaggaggcc gcccagcgga tgacctagat tgtctactgc
 180
 tgtgtctgcc ctgtagtttg acggggaaga actgatgaac tcgtattgtg gttttccgaa
 240
 tctagtttca tatgtttctg tccaccagac catgtttaga agctt
 285

<210> 1822
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 1822
 Lys Leu Glu Phe Ser Lys Ile Leu Glu Ala Ile Lys Ala Asn Phe Asn
 1 5 10 15
 Asp Lys Phe Asp Glu Val Gly Lys Lys Trp Gly Gly Gly Ile Met Gly
 20 25 30
 Ser Lys Ser Gln Ala Lys Thr Lys Ala Arg Glu Lys Leu Leu Ala Lys
 35 40 45
 Glu Ala Ala Gln Arg Met Thr
 50 55

<210> 1823
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 1823
 ngttggtgc tggtgctggg cgttctgtcc ctgacgggct gcgcccgttc cgatgcgctg
 60
 tggggcgtgg tcgataagct ctgcatggcc aactatcagc aaaagcgca tccggccccg
 120
 tgtgagcaga tttatatgcc gcagggtaaa gcgcagggt ttagcgtgct gcaaaacccg
 180
 cgttatccct atcatttcat tctggtgccg acggcgccgc tttccggcat tgaaagcccc
 240
 ctgctgctgg ccggagagcg aacggactat tttggctatg catggctgat gcgttaccgg
 300
 ctggccgccg agtatggcgg gccggtgccg gacgacaggc tgggcatggc gatcaactcc
 360
 gcttacggcc gcagccagaa ccaattg
 387

<210> 1824
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 1824
 Xaa Trp Leu Leu Leu Leu Gly Val Leu Ser Leu Thr Gly Cys Ala Arg
 1 5 10 15
 Ser Asp Ala Leu Trp Gly Val Val Asp Lys Leu Cys Met Ala Asn Tyr
 20 25 30
 Gln Gln Lys Arg Asp Pro Ala Pro Cys Glu Gln Ile Tyr Met Pro Gln
 35 40 45
 Gly Lys Ala Gln Gly Phe Ser Val Leu Gln Asn Pro Arg Tyr Pro Tyr
 50 55 60
 His Phe Ile Leu Val Pro Thr Ala Pro Leu Ser Gly Ile Glu Ser Pro
 65 70 75 80
 Leu Leu Leu Ala Gly Glu Arg Thr Asp Tyr Phe Gly Tyr Ala Trp Leu
 85 90 95
 Met Arg Tyr Arg Leu Ala Ala Glu Tyr Gly Gly Pro Val Pro Asp Asp
 100 105 110
 Arg Leu Gly Met Ala Ile Asn Ser Ala Tyr Gly Arg Ser Gln Asn Gln
 115 120 125
 Leu

<210> 1825
 <211> 413
 <212> DNA
 <213> Homo sapiens

<400> 1825
 gtgcacggac gaccgcgcac agggactcgt gtgccgcgca tgggacgacg gcgatgcgtg
 60

tgcgtgcata ccgctgctct ggcaggctgt gcgtgcgatt gtcgccgaca catcggcggc
 120
 ttggcacgtc gtgattgggc gcctaggcac catgtcgag gccgacatgg acatgtgggc
 180
 gtcgtgcctc gatacgcgcg acccttcctg ctctcgggtg gccttggtg cctggagcgc
 240
 gatgcctggc ctacgggcac gcgatgcac ggtgggtctac ctgtcggaca tgccgctggg
 300
 tctggcctca ggtgctggc cgatccgct gcctcgctcg gcgttatgtg tctgccggcg
 360
 cctatgcat tcatctctg cagctacgtc acctggctga tctcgacgcg gct
 413

<210> 1826
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 1826
 Met Gly Arg Arg Arg Cys Val Cys Val His Thr Ala Ala Leu Ala Gly
 1 5 10 15
 Arg Ala Cys Asp Cys Arg Arg His Ile Gly Gly Leu Ala Arg Arg Asp
 20 25 30
 Trp Ala Pro Arg His His Val Ala Gly Arg His Gly His Val Gly Val
 35 40 45
 Val Pro Arg Tyr Ala Arg Pro Phe Leu Leu Ser Val Gly Leu Val Cys
 50 55 60
 Leu Glu Arg Asp Ala Trp Pro Thr Gly Thr Arg Cys Ile Gly Gly Leu
 65 70 75 80
 Pro Val Gly His Ala Ala Gly Ser Gly Leu Arg Cys Val Ala Asp Pro
 85 90 95
 Arg Ala Ser Leu Gly Val Met Cys Leu Pro Ala Pro Met Pro Phe Ile
 100 105 110
 Ser Cys Ser Tyr Val Thr Trp Leu Ile Ser Thr Arg
 115 120

<210> 1827
 <211> 345
 <212> DNA
 <213> Homo sapiens

<400> 1827
 ctggccaact gggcgccgga cctgttcatt aagcgctcg aagccgacca ggaatggctg
 60
 ctgttcgac cgcgcgtggt gccggagttc accgacctgt tcggcgaagc cttcgaagcc
 120
 gcctacctgc aggccgaagc gcagggcaag gccaaaccgca cgatctctgc ccgcaagctg
 180
 tacgccccga tgatgcgtac gctggccgag accggcaacg gctggatgac cttcaaggac
 240
 aagtgcgaacc gcgccagcaa ccagaccctg cgtccgggca acgtgatcca cctgtccaac
 300
 ctgtgcaccg aaatcctgga agtcacttcc aacgatgaaa ccgcg
 345

```

<400> 1628
Leu Ala Asn Trp Val Pro Asp Leu Phe Met Lys Arg Val Glu Ala Asp
  1              5              10              15
Gln Glu Trp Ser Leu Phe Asp Pro Arg Val Val Pro Glu Phe Thr Asp
          20              25              30
Leu Phe Gly Glu Ala Phe Glu Ala Ala Tyr Leu Gln Ala Glu Ala Gln
          35              40              45
Gly Lys Ala Asn Arg Thr Ile Ser Ala Arg Lys Leu Tyr Ala Arg Met
          50              55              60
Met Arg Thr Leu Ala Glu Thr Gly Asn Gly Trp Met Thr Phe Lys Asp
65              70              75              80
Lys Cys Asn Arg Ala Ser Asn Gln Thr Leu Arg Pro Gly Asn Val Ile
          85              90              95
His Leu Ser Asn Leu Cys Thr Glu Ile Leu Glu Val Thr Ser Asn Asp
          100              105              110
Glu Thr Ala
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<400> 1829
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 4457

<210> 1830

<211> 1377

<212> PRT

<213> Homo sapiens

<400> 1830

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			20					25					30		
Asn	Leu	Ser	Tyr	Glu	Val	Asp	Pro	Glu	Thr	Val	Asn	Ala	Gln	Glu	Asp
			35				40					45			
Ser	Gln	Met	Pro	Lys	Glu	Ser	Ser	Pro	Asp	Asp	Asp	Val	Gln	Gln	Val
	50					55				60					
Val	Phe	Asp	Leu	Ile	Cys	Lys	Val	Val	Ser	Gly	Leu	Glu	Val	Glu	Ser
65					70					75				80	
Ala	Ser	Val	Thr	Ser	Gln	Leu	Glu	Ile	Glu	Ala	Met	Pro	Pro	Lys	Cys
				85					90					95	
Ser	Asp	Ile	Asp	Pro	Asp	Glu	Glu	Thr	Ile	Lys	Ile	Glu	Asp	Asp	Ser
			100					105					110		
Ile	Arg	Gln	Ser	Gln	Asn	Ala	Leu	Leu	Ser	Asn	Glu	Ser	Ser	Gln	Phe
			115				120						125		
Leu	Ser	Val	Ser	Ala	Glu	Gly	Gly	His	Glu	Cys	Val	Ala	Asn	Gly	Ile
			130			135					140				
Ser	Arg	Asn	Ser	Ser	Ser	Pro	Cys	Ile	Ser	Gly	Thr	Thr	His	Thr	Leu
145					150					155					160
His	Asp	Ser	Ser	Val	Ala	Ser	Ile	Glu	Thr	Lys	Ser	Arg	Gln	Arg	Ser
				165					170					175	
His	Ser	Ser	Ile	Gln	Phe	Ser	Phe	Lys	Glu	Lys	Leu	Ser	Glu	Lys	Val
			180					185					190		
Ser	Glu	Lys	Glu	Thr	Ile	Val	Lys	Glu	Ser	Gly	Lys	Gln	Pro	Gly	Ala
			195				200						205		
Lys	Pro	Lys	Val	Lys	Leu	Ala	Arg	Lys	Lys	Asp	Asp	Asp	Lys	Lys	Lys
			210			215					220				
Ser	Ser	Asn	Glu	Lys	Leu	Lys	Gln	Thr	Ser	Val	Phe	Phe	Ser	Asp	Gly

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          260          265          270
Asn Ile His Pro Leu Tyr Gln His Val Leu Leu Tyr Leu Gln Leu Tyr
          275          280          285
Asp Ser Ser Arg Thr Leu Tyr Ala Phe Ser Ala Ile Lys Ala Ile Leu
          290          295          300
Lys Thr Asn Pro Ile Ala Phe Val Asn Ala Ile Ser Thr Thr Ser Val
305          310          315          320
Asn Asn Ala Tyr Thr Pro Gln Leu Ser Leu Leu Gln Asn Leu Leu Ala
          325          330          335
Arg His Arg Ile Ser Val Met Gly Lys Asp Phe Tyr Ser His Ile Pro
          340          345          350
Val Asp Ser Asn His Asn Phe Arg Ser Ser Met Tyr Ile Glu Ile Leu
          355          360          365
Ile Ser Leu Cys Leu Tyr Tyr Met Arg Ser His Tyr Pro Thr His Val
          370          375          380
Lys Val Thr Ala Gln Asp Leu Ile Gly Asn Arg Asn Met Gln Met Met
385          390          395          400
Ser Ile Glu Ile Leu Thr Leu Leu Phe Thr Glu Leu Ala Lys Val Ile
          405          410          415
Glu Ser Ser Ala Lys Gly Phe Pro Ser Phe Ile Ser Asp Met Leu Ser
          420          425          430
Lys Cys Lys Val Gln Lys Val Ile Leu His Cys Leu Leu Ser Ser Ile
          435          440          445
Phe Ser Ala Gln Lys Trp His Ser Glu Lys Met Ala Gly Lys Asn Leu
          450          455          460
Val Ala Val Glu Glu Gly Phe Ser Glu Asp Ser Leu Ile Asn Phe Ser
465          470          475          480
Glu Asp Glu Phe Asp Asn Gly Ser Thr Leu Gln Ser Gln Leu Leu Lys
          485          490          495
Val Leu Gln Arg Leu Ile Val Leu Glu His Arg Val Met Thr Ile Pro
          500          505          510
Glu Glu Asn Glu Thr Gly Phe Asp Phe Val Val Ser Asp Leu Glu His
          515          520          525
Ile Ser Pro His Gln Pro Met Thr Ser Leu Gln Tyr Leu His Ala Gln
          530          535          540
Pro Ile Thr Cys Gln Gly Met Phe Leu Cys Ala Val Ile Arg Ala Leu
545          550          555          560
His Gln His Cys Ala Cys Lys Met His Pro Gln Trp Ile Gly Leu Ile
          565          570          575
Thr Ser Thr Leu Pro Tyr Met Gly Lys Val Leu Gln Arg Val Val Val
          580          585          590
Ser Val Thr Leu Gln Leu Cys Arg Asn Leu Asp Asn Leu Ile Gln Gln
          595          600          605
Tyr Lys Tyr Glu Thr Gly Leu Ser Asp Ser Arg Pro Leu Trp Met Ala
          610          615          620
Ser Ile Ile Pro Pro Asp Met Ile Leu Thr Leu Leu Glu Gly Ile Thr
625          630          635          640
Ala Ile Ile His Tyr Cys Leu Leu Asp Pro Thr Thr Gln Tyr His Gln
          645          650          655
Leu Leu Val Ser Val Asp Gln Lys His Leu Phe Glu Ala Arg Ser Gly

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        660                665                670
Ile Leu Ser Ile Leu His Met Ile Met Ser Ser Val Thr Leu Leu Trp
        675                680                685
Ser Ile Leu His Gln Ala Asp Ser Ser Glu Lys Met Thr Ile Ala Ala
        690                695                700
Ser Ala Ser Leu Thr Thr Ile Asn Leu Gly Ala Thr Lys Asn Leu Arg
705                710                715                720
Gln Gln Ile Leu Glu Leu Leu Gly Pro Ile Ser Met Asn His Gly Val
        725                730                735
His Phe Met Ala Ala Ile Ala Phe Val Trp Asn Glu Arg Arg Gln Asn
        740                745                750
Lys Thr Thr Thr Arg Thr Lys Val Ile Pro Ala Ala Ser Glu Glu Gln
        755                760                765
Leu Leu Leu Val Glu Leu Val Arg Ser Ile Ser Val Met Arg Ala Glu
770                775                780
Thr Val Ile Gln Thr Val Lys Glu Val Leu Lys Gln Pro Pro Ala Ile
785                790                795                800
Ala Lys Asp Lys Lys His Leu Ser Leu Glu Val Cys Met Leu Gln Phe
        805                810                815
Phe Tyr Ala Tyr Ile Gln Arg Ile Pro Val Pro Asn Leu Val Asp Ser
        820                825                830
Trp Ala Ser Leu Leu Ile Leu Leu Lys Asp Ser Ile Gln Leu Ser Leu
        835                840                845
Pro Ala Pro Gly Gln Phe Leu Ile Leu Gly Val Leu Asn Glu Phe Ile
850                855                860
Met Lys Asn Pro Ser Leu Glu Asn Lys Lys Asp Gln Arg Asp Leu Gln
865                870                875                880
Asp Val Thr His Lys Ile Val Asp Ala Ile Gly Ala Ile Ala Gly Ser
        885                890                895
Ser Leu Glu Gln Thr Thr Trp Leu Arg Arg Asn Leu Glu Val Lys Pro
        900                905                910
Ser Pro Lys Ile Met Val Asp Gly Thr Asn Leu Glu Ser Asp Val Glu
        915                920                925
Asp Met Leu Ser Pro Ala Met Glu Thr Ala Asn Ile Thr Pro Ser Val
930                935                940
Tyr Ser Val His Ala Leu Thr Leu Leu Ser Glu Val Leu Ala His Leu
945                950                955                960
Leu Asp Met Val Phe Tyr Ser Asp Glu Lys Glu Arg Val Ile Pro Leu
        965                970                975
Leu Val Asn Ile Met His Tyr Val Val Pro Tyr Leu Arg Asn His Ser
        980                985                990
Ala His Asn Ala Pro Ser Tyr Arg Ala Cys Val Gln Leu Leu Ser Ser
        995                1000                1005
Leu Ser Gly Tyr Gln Tyr Thr Arg Arg Ala Trp Lys Lys Glu Ala Phe
1010                1015                1020
Asp Leu Phe Met Asp Pro Ser Phe Phe Gln Met Asp Ala Ser Cys Val
1025                1030                1035                1040
Asn His Trp Arg Ala Ile Met Asp Asn Leu Met Thr His Asp Lys Thr
        1045                1050                1055
Thr Phe Arg Asp Leu Met Thr Arg Val Ala Val Ala Gln Ser Ser Ser
        1060                1065                1070
Leu Asn Leu Phe Ala Asn Arg Asp Val Glu Leu Glu Gln Arg Ala Met
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Leu Leu Lys Arg Leu Ala Phe Ala Ile Phe Ser Ser Glu Ile Asp Gln

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 1125 1130 1135
 Arg Val Leu Leu Leu Arg Met Ser Pro Gln His Leu Thr Ser Leu Trp
 1140 1145 1150
 Pro Thr Met Ile Thr Glu Leu Val Gln Val Phe Leu Leu Met Glu Gln
 1155 1160 1165
 Glu Leu Thr Ala Asp Glu Asp Ile Ser Arg Thr Ser Gly Pro Ser Val
 1170 1175 1180
 Ala Gly Leu Glu Thr Thr Tyr Thr Gly Gly Asn Gly Phe Ser Thr Ser
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 Tyr Asn Ser Gln Arg Trp Leu Asn Leu Tyr Leu Ser Ala Cys Lys Phe
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 Leu Asp Leu Ala Leu Ala Leu Pro Ser Glu Asn Leu Pro Gln Phe Gln
 1220 1225 1230
 Met Tyr Arg Trp Ala Phe Ile Pro Glu Ala Ser Asp Asp Ser Gly Leu
 1235 1240 1245
 Glu Val Arg Arg Gln Gly Ile His Gln Arg Glu Phe Lys Pro Tyr Val
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 Val Arg Leu Ala Lys Leu Leu Arg Lys Arg Ala Lys Lys Asn Pro Glu
 1265 1270 1275 1280
 Glu Asp Asn Ser Gly Arg Thr Leu Gly Trp Glu Pro Gly His Leu Leu
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 Leu Thr Ile Cys Thr Val Arg Ser Met Glu Gln Leu Leu Pro Phe Phe
 1300 1305 1310
 Asn Val Leu Ser Gln Val Phe Asn Ser Lys Val Thr Ser Arg Cys Gly
 1315 1320 1325
 Gly His Ser Gly Ser Pro Ile Leu Tyr Ser Asn Ala Phe Pro Asn Lys
 1330 1335 1340
 Asp Met Lys Leu Glu Asn His Lys Pro Cys Ser Ser Lys Ala Arg Gln
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<210> 1831
 <211> 508
 <212> DNA
 <213> Homo sapiens

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<210> 1832
 <211> 169
 <212> PRT
 <213> Homo sapiens

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 Tyr Asp Asn Ala Leu Lys Gly Phe Ile Leu Glu Ala Arg Pro Ser Gly
 35 40 45
 Gly Lys Thr Phe Tyr Leu Arg Tyr His Asp Ser His Gly Lys Leu Arg
 50 55 60
 Gln Cys Lys Ile Gly Asp Ala Ala Ala Val Ser Tyr Asp Lys Ala Arg
 65 70 75 80
 Gln Lys Ala Met Arg Leu Arg Trp Lys Val Glu Trp Gly Gly Asn Pro
 85 90 95
 Leu Glu Glu Arg Gln Ala Leu Arg Ala Val Pro Thr Leu Ala Glu Phe
 100 105 110
 Ile Arg Glu Thr Tyr Val Pro His Ile His Leu His Arg Arg Asn Phe
 115 120 125
 Gln Ser Thr Leu Ser Phe Leu Lys Cys His Val Leu Pro Arg Phe Gly
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<210> 1833
 <211> 430
 <212> DNA
 <213> Homo sapiens

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<210> 1834
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 1834
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 35 40 45
 His His Gln Val Glu Thr Asp Asp Pro Arg Arg Asp Ala Phe Ser Ala
 50 55 60
 Arg Val Trp Gln Arg Leu Gly Leu Gly Phe Pro Ala Phe Arg Arg Arg
 65 70 75 80
 Pro Ala Ile Leu Glu Ile Asp Glu His Leu Arg Arg Ser Cys Cys Gln
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 Thr Gln Glu Pro Lys Arg Arg Arg Leu Gln
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<210> 1835
 <211> 677
 <212> DNA
 <213> Homo sapiens

<400> 1835
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 677

<210> 1836
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 1836
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 35 40 45
 Pro Ser Gly Tyr Pro Ala Thr Pro Gly Thr Val Pro Pro Ser Glu Pro
 50 55 60
 Pro Ala Ala Ser Gly Pro Gly Pro Pro Ser Ala His Gly Pro Asn Pro
 65 70 75 80
 Gly Leu Gly Pro Pro Ser Gly Pro Gly Ser Pro Gly Ser Pro Ala Pro
 85 90 95
 Pro Gln Ser Leu Ala Ala Trp Arg Pro Glu Asp Ala Arg Leu Arg Cys
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 Pro Pro Glu Cys Asp Arg Val Tyr Leu Asn Tyr Pro Pro Phe Asn Gly
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 Gly His Ser Ala Ala Gln Pro Ala Ser Gly Pro Glu
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<210> 1837
 <211> 564
 <212> DNA
 <213> Homo sapiens

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 gggaaatcta ccccgtaac caaggccatc gcgattcaaa actgggttcg tgacagcgct
 420
 cgattccatt acgacatcaa cgcacccgaa ggtgacggct atcaggtact ggaaaacttc
 480

ctgctgcaca cccaccgcgg ttattgcac catttcgcgg cgtcaatggc actcatggca
 540
 cgacttgaag gtattccgtc acgc
 564

<210> 1838
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 1838
 Xaa Leu Glu His Ser Ala Pro Glu Ser Val Pro Gly Leu Phe Gly Pro
 1 5 10 15
 Ser Arg Thr Arg Thr Val Asp Ile Asn Ile Thr Gly Phe Ser Ser Gln
 20 25 30
 Tyr Leu Pro Ala Pro Tyr Gly Pro Ile Ala Ala Asp Val Lys Gln Thr
 35 40 45
 Trp Ala Trp Asp Pro Gln Asp Leu Thr Ile Val Ser Thr Ser Ala Asp
 50 55 60
 His Asp His Asn Leu Arg Tyr Ala Val Gln His Phe Gly Ala Ser Pro
 65 70 75 80
 Thr Pro Ile Gln

<210> 1839
 <211> 300
 <212> DNA
 <213> Homo sapiens

<400> 1839
 ncaatacggc tgaacaccgc tgatatacc cgtactttcc cgtcaacgg aaaattttcc
 60
 gaagttcagg caaaggctta tcaggcgggtg ctggacgctg cagatgcggc atttaaggca
 120
 gccgttcctg gcaataaatt ccgcgacgtc catgctgcag cgatgaatgt tctcgctcc
 180
 cgccttgagg actgggggct tatgccggtc agcgcgaagg tcgctctttc ggacgagggc
 240
 gggcaacacc gtcgttggtat gccgcacggc accagccacc atctagggct ggatgtgcac
 300

<210> 1840
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 1840
 Xaa Ile Arg Leu Asn Thr Ala Asp Ile Thr Arg Thr Phe Pro Val Asn
 1 5 10 15
 Gly Lys Phe Ser Glu Val Gln Ala Lys Ala Tyr Gln Ala Val Leu Asp
 20 25 30
 Ala Ala Asp Ala Ala Phe Lys Ala Ala Val Pro Gly Asn Lys Phe Arg
 35 40 45
 Asp Val His Ala Ala Ala Met Asn Val Leu Ala Ser Arg Leu Glu Asp

```

      50              55              60
Trp Gly Leu Met Pro Val Ser Ala Lys Val Ala Leu Ser Asp Glu Gly
65              70              75              80
Gly Gln His Arg Arg Trp Met Pro His Gly Thr Ser His His Leu Gly
      85              90              95
Leu Asp Val His
      100

```

<210> 1841
 <211> 330
 <212> DNA
 <213> Homo sapiens

```

<400> 1841
nnctccaaga acgtcccgga gtggggcccc agggcgctcg aactccccgg cgggcccggg
60
gtcgatccgg tggtcgagat cggcgggtccc ggtacgctag cccaatcgat ggtcgccccg
120
cgcgtcggcg cccatgtcgc cttgatcggc gtgcttnacg gggattgtcg ggcgggtgagg
180
acggcgctgc tgatgagcaa gaatctgcgc gtgcaagggc tgccgggtcgg cagccgcgcg
240
cagcaactcg cgatgatcgc gggggtcgag gcgaacggca tccgtccgat cctcgaccag
300
catttcccgc tcgaaaatct ccccgacgcg
330

```

<210> 1842
 <211> 110
 <212> PRT
 <213> Homo sapiens

```

<400> 1842
Xaa Ser Lys Asn Val Pro Glu Trp Gly Pro Arg Ala Leu Glu Leu Pro
1      5      10      15
Gly Gly Pro Gly Val Asp Pro Val Val Glu Ile Gly Gly Pro Gly Thr
      20      25      30
Leu Ala Gln Ser Met Val Ala Pro Arg Val Gly Ala His Val Ala Leu
      35      40      45
Ile Gly Val Leu Xaa Gly Asp Cys Arg Ala Val Arg Thr Ala Leu Leu
50      55      60
Met Ser Lys Asn Leu Arg Val Gln Gly Leu Pro Val Gly Ser Arg Ala
65      70      75      80
Gln Gln Leu Ala Met Ile Ala Gly Val Glu Ala Asn Gly Ile Arg Pro
      85      90      95
Ile Leu Asp Gln His Phe Pro Leu Glu Asn Leu Pro Asp Ala
      100      105      110

```

<210> 1843
 <211> 473
 <212> DNA
 <213> Homo sapiens

<400> 1843

aagctttggc atctccagca aaagatgtgc tatttactga taccatcacc atgaaggcca
 60
 acagttttga gtccagatta acaccaagca ggttcacgaa agccttaagt tatgcatcat
 120
 tagataaaga agattttattg agtcctatta atcaaaatac cctgcaacga tcttcctcag
 180
 tgcggtccat ggtgtccagt gccacatatg ggggttcaga tgattacatt ggtcttgctc
 240
 tcccgggtgga tataaatgat atattccagg taaaggatat tccctatttt cagacaaaaa
 300
 acataccacc acatgatgat cgaggtgcaa gagcatttgc ccatgatgca ggaggtcttc
 360
 catctggaac tggaggtctt gtaaaaaatt cttttcactt gctacgacag cagatgagtc
 420
 ttacggaaat aatgaattca atccattcag atgcctctcn cnnccnccccc
 473

<210> 1844

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1844

Met	Lys	Ala	Asn	Ser	Phe	Glu	Ser	Arg	Leu	Thr	Pro	Ser	Arg	Phe	Met
1				5					10					15	
Lys	Ala	Leu	Ser	Tyr	Ala	Ser	Leu	Asp	Lys	Glu	Asp	Leu	Leu	Ser	Pro
			20					25					30		
Ile	Asn	Gln	Asn	Thr	Leu	Gln	Arg	Ser	Ser	Ser	Val	Arg	Ser	Met	Val
		35					40					45			
Ser	Ser	Ala	Thr	Tyr	Gly	Gly	Ser	Asp	Asp	Tyr	Ile	Gly	Leu	Ala	Leu
	50					55					60				
Pro	Val	Asp	Ile	Asn	Asp	Ile	Phe	Gln	Val	Lys	Asp	Ile	Pro	Tyr	Phe
65				70						75				80	
Gln	Thr	Lys	Asn	Ile	Pro	Pro	His	Asp	Asp	Arg	Gly	Ala	Arg	Ala	Phe
			85						90					95	
Ala	His	Asp	Ala	Gly	Gly	Leu	Pro	Ser	Gly	Thr	Gly	Gly	Leu	Val	Lys
			100					105					110		
Asn	Ser	Phe	His	Leu	Leu	Arg	Gln	Gln	Met	Ser	Leu	Thr	Glu	Ile	Met
		115				120						125			
Asn	Ser	Ile	His	Ser	Asp	Ala	Ser	Xaa	Xaa	Xaa	Xaa	Pro			
	130					135						140			

<210> 1845

<211> 390

<212> DNA

<213> Homo sapiens

<400> 1845

aagcttacga cgcctagctt tggagacctg aaccacttga tcagtgaac aatgagtgga
 60
 gtgacttgct gcctccgctt cccggggcag ctcaactcgg accttcggaa acttgacgtg
 120
 aacctgatcc cattccctcg cctgcacttt tttatggctg gctttgcgcc actcacctcg
 180

cgtggctccc agcagtaccg tgetctcact gtccctgagc tgaccagca gatgtgggac
 240
 tccaagaaca tgatgtgtgc tgetgacccg cgtcatggcc gctacctcac agtatctgccc
 300
 atgttccgtg gaaagatgag caccaaggag gtggacgagc agatgctgaa cgtgcagaac
 360
 aagaactctt cctacttcgt ggagtggatc
 390

<210> 1846
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1846
 Lys Leu Thr Thr Pro Ser Phe Gly Asp Leu Asn His Leu Ile Ser Ala
 1 5 10 15
 Thr Met Ser Gly Val Thr Cys Cys Leu Arg Phe Pro Gly Gln Leu Asn
 20 25 30
 Ser Asp Leu Arg Lys Leu Ala Val Asn Leu Ile Pro Phe Pro Arg Leu
 35 40 45
 His Phe Phe Met Val Gly Phe Ala Pro Leu Thr Ser Arg Gly Ser Gln
 50 55 60
 Gln Tyr Arg Ala Leu Thr Val Pro Glu Leu Thr Gln Gln Met Trp Asp
 65 70 75 80
 Ser Lys Asn Met Met Cys Ala Ala Asp Pro Arg His Gly Arg Tyr Leu
 85 90 95
 Thr Val Ser Ala Met Phe Arg Gly Lys Met Ser Thr Lys Glu Val Asp
 100 105 110
 Glu Gln Met Leu Asn Val Gln Asn Lys Asn Ser Ser Tyr Phe Val Glu
 115 120 125
 Trp Ile
 130

<210> 1847
 <211> 343
 <212> DNA
 <213> Homo sapiens

<400> 1847
 cagccgtgct ttctgctgac aactcgggaa cggctatatc gcgcagatcc aacagttcca
 60
 tggctcgaag agtagtaaaa atatcaataa ctggcagagc atcgcgctcaa gctggcgacc
 120
 ctggccgccc ccgcgttggc cgatcacgcc atgttgagc aggccttcca gctgttccag
 180
 caaaaaagtt gcggacaatc tctgcccga tggctcgggtg ttcgacttca gggagcgcca
 240
 tgcactgcac tacgtcgtct atgacctgga gccgctgggt caggcggccc tggcgggcaa
 300
 gccctaacgg tggcaactgg ctgacttaca ccgccccac cgn
 343

<210> 1848

<211> 94
 <212> PRT
 <213> Homo sapiens

<400> 1848
 Met Ala Arg Arg Val Val Lys Ile Ser Ile Thr Gly Arg Ala Ser Arg
 1 5 10 15
 Gln Ala Gly Asp Pro Gly Arg Arg Arg Val Gly Arg Ser Arg His Val
 20 25 30
 Gly Ala Gly Leu Pro Ala Val Pro Ala Lys Lys Leu Arg Thr Ile Ser
 35 40 45
 Cys Arg Met Ala Arg Cys Ser Thr Ser Gly Ser Ala Met His Cys Thr
 50 55 60
 Thr Ser Ser Met Thr Trp Ser Arg Trp Phe Arg Arg Pro Trp Arg Ala
 65 70 75 80
 Ser Pro Asn Gly Gly Asn Trp Leu Thr Tyr Thr Ala Pro Thr
 85 90

<210> 1849
 <211> 390
 <212> DNA
 <213> Homo sapiens

<400> 1849
 cggaagaac aggttcagca aagagcaata gaatgttccc gggctctcag tgcgattctt
 60
 gacattgaac atggagaccc aaaagagaat gtactagggt cagcttttga catgaaacag
 120
 ctgaaggatg ctattgatga gactaaaata gctttgatgg gacattcttt tggaggagca
 180
 acagttcttc aagcccttag tgaggaccag agattcagat gtggagttgc tcttgatcca
 240
 tggatgtatc cgggtgaacga agagctgtac tccagaaccc tccagcctct cctctttatc
 300
 aactctgccca aattccagac tccaaaggac atcgcaaaaa tgaaaaagtt ctaccagcct
 360
 gacaaggaaa ggaaanatga ttacaatcaa
 390

<210> 1850
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1850
 Arg Lys Glu Gln Val Gln Gln Arg Ala Ile Glu Cys Ser Arg Ala Leu
 1 5 10 15
 Ser Ala Ile Leu Asp Ile Glu His Gly Asp Pro Lys Glu Asn Val Leu
 20 25 30
 Gly Ser Ala Phe Asp Met Lys Gln Leu Lys Asp Ala Ile Asp Glu Thr
 35 40 45
 Lys Ile Ala Leu Met Gly His Ser Phe Gly Gly Ala Thr Val Leu Gln
 50 55 60
 Ala Leu Ser Glu Asp Gln Arg Phe Arg Cys Gly Val Ala Leu Asp Pro


```

65              70              75              80
Trp Met Tyr Pro Val Asn Glu Glu Leu Tyr Ser Arg Thr Leu Gln Pro
              85              90              95
Leu Leu Phe Ile Asn Ser Ala Lys Phe Gln Thr Pro Lys Asp Ile Ala
              100              105              110
Lys Met Lys Lys Phe Tyr Gln Pro Asp Lys Glu Arg Lys Xaa Asp Tyr
              115              120              125
Asn Gln
130

```

<210> 1851
 <211> 574
 <212> DNA
 <213> Homo sapiens

```

<400> 1851
ncgatcggag aggcctttccg cactggtgac ttggactcta agcccgaccc cagccggagc
60
ttcaggcctt accgagctga agacaatgat tcctatgcct ctgagatcaa ggagctgcag
120
ctggtgctgg ctgaggccca cgacagcctc cggggcttgc aagagcagct ctcccaggag
180
cggcagctac gaaaggagga ggccgacaat ttcaaccaga aaatggtcca gctgaaggag
240
gaccagcaga gggcgctcct gaggcgggag tttgagctgc agagtctgag cctccagcgg
300
aggctggagc agaaattctg gagccaggag aagaacatgc tgggtgcagga gtcccagcaa
360
ttcaagcaca acttctgct gctcttcctg aagctcaggt gggttcctcaa gcgctggcgg
420
cagggcaagg ttttgcccag cgaaggggat gacttcctcg aggtgaacag catgaaggac
480
ctgtacttgc tgatggagga agacgagata aacgctcagc attctgataa caaggcctgc
540
acggggggaca gctggaccca gaacacgccc aatg
574

```

<210> 1852
 <211> 191
 <212> PRT
 <213> Homo sapiens

```

<400> 1852
Xaa Ile Gly Glu Ala Phe Arg Thr Gly Asp Leu Asp Ser Lys Pro Asp
1              5              10              15
Pro Ser Arg Ser Phe Arg Pro Tyr Arg Ala Glu Asp Asn Asp Ser Tyr
20              25              30
Ala Ser Glu Ile Lys Glu Leu Gln Leu Val Leu Ala Glu Ala His Asp
35              40              45
Ser Leu Arg Gly Leu Gln Glu Gln Leu Ser Gln Glu Arg Gln Leu Arg
50              55              60
Lys Glu Glu Ala Asp Asn Phe Asn Gln Lys Met Val Gln Leu Lys Glu
65              70              75              80
Asp Gln Gln Arg Ala Leu Leu Arg Arg Glu Phe Glu Leu Gln Ser Leu

```

```

      85              90              95
Ser Leu Gln Arg Arg Leu Glu Gln Lys Phe Trp Ser Gln Glu Lys Asn
      100              105              110
Met Leu Val Gln Glu Ser Gln Gln Phe Lys His Asn Phe Leu Leu Leu
      115              120              125
Phe Met Lys Leu Arg Trp Phe Leu Lys Arg Trp Arg Gln Gly Lys Val
      130              135              140
Leu Pro Ser Glu Gly Asp Asp Phe Leu Glu Val Asn Ser Met Lys Asp
145              150              155              160
Leu Tyr Leu Leu Met Glu Glu Asp Glu Ile Asn Ala Gln His Ser Asp
      165              170              175
Asn Lys Ala Cys Thr Gly Asp Ser Trp Thr Gln Asn Thr Pro Asn
      180              185              190

```

<210> 1853
 <211> 338
 <212> DNA
 <213> Homo sapiens

<400> 1853
 gccggcgccg accaagccac ggcatgcccc acccaccttg gaagaggtgt cgttccgcca
 60
 cgtcattgag gagcgcgcgc tcgaagctga cttgttcgtc cgctcgctca atacactcga
 120
 gcctgcgacg ggcatggcac ttctgcgcac ctcgcaccac atggatggca aggtcggcac
 180
 gacgttttac ctggatgacg atgtcatttt tgcgcgcgcca cagaagcagc gctcagccga
 240
 gggccagcga ctgaatacag agcccgtctc ttggccgag ttgctcgagc gcgctgctgc
 300
 atagaataca tatacccaag ctatgatgat gccgtcgt
 338

<210> 1854
 <211> 100
 <212> PRT
 <213> Homo sapiens

```

<400> 1854
Met Pro His Pro Pro Trp Lys Arg Cys Arg Ser Ala Thr Ser Leu Arg
  1              5              10              15
Ser Ala Pro Ser Lys Leu Thr Cys Ser Ser Ala Arg Ser Ile His Ser
      20              25              30
Ser Leu Arg Arg Ala Trp His Phe Cys Ala Ser Arg Thr Thr Trp Met
      35              40              45
Ala Arg Ser Ala Arg Arg Phe Thr Trp Met Thr Met Ser Phe Leu Ser
      50              55              60
Arg His Arg Ser Ser Ala Gln Pro Arg Ala Ser Asp Ser Asn Thr Ser
      65              70              75              80
Pro Ser Leu Trp Pro Ser Cys Ser Ser Ala Leu Leu His Arg Ile His
      85              90              95
Ile Pro Lys Leu
      100

```

<210> 1855
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 1855
 gcgtccttcg cgtacgtgga cgagggcggg caggtgttcg tccagtgcag caccagcac
 60
 ccgagcgaaa cgcaggaaat cgtggcgac gtcctggacc tggacaacca cgaggtcacg
 120
 gtgcagtgct tgcgcattgg cggtggcttt ggcggtaagg aaatgcagcc gcacgggttc
 180
 gccgcgatcg cagcactcgg cgcgacctg accggggcgac cggttcgact gcgactgacc
 240
 cgaaaccagg acatcaccat ctccggaaag cgccacccat acctcgcgga gtgggacgtg
 300
 gccttcgacg acgacggcgg cctccaggct ctgcgcgcca ccgtcaccag cgacggcggg
 360
 tggagcctgg acctctcgga gccggtgatg cagcggacgg tgtgtcacat cgataactcc
 420
 tattggatc
 429

<210> 1856
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 1856
 Ala Ser Phe Ala Tyr Val Asp Glu Gly Gly Gln Val Phe Val Gln Cys
 1 5 10 15
 Ser Thr Gln His Pro Ser Glu Thr Gln Glu Ile Val Ala His Val Leu
 20 25 30
 Asp Leu Asp Asn His Glu Val Thr Val Gln Cys Leu Arg Met Gly Gly
 35 40 45
 Gly Phe Gly Gly Lys Glu Met Gln Pro His Gly Phe Ala Ala Ile Ala
 50 55 60
 Ala Leu Gly Ala Thr Leu Thr Gly Arg Pro Val Arg Leu Arg Leu Thr
 65 70 75 80
 Arg Asn Gln Asp Ile Thr Ile Ser Gly Lys Arg His Pro Tyr Leu Ala
 85 90 95
 Glu Trp Asp Val Ala Phe Asp Asp Asp Gly Arg Leu Gln Ala Leu Arg
 100 105 110
 Ala Thr Val Thr Ser Asp Gly Gly Trp Ser Leu Asp Leu Ser Glu Pro
 115 120 125
 Val Met Gln Arg Thr Val Cys His Ile Asp Asn Ser Tyr Trp Ile
 130 135 140

<210> 1857
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 1857

gtgcacgccg ctgccccagc cgtcgccctac cgatcaacag acgcagccgc cgtgcgttga
 60
 gataccagcc gagcacgata atgctcagca tggtcagcag cagccagaac ggaaatcgca
 120
 gcaggcgctc gaacagctca ctgccaccca gcaccagcgg gattgccccg gccacgacca
 180
 gtgcgcccag gagcagccac catcgcccgc tcatgctgcg gcactcgata ccaatacgtt
 240
 gcgcttcaac caatcgatct tggtcgagggc atgccgccc tcttccaaca ggcgagtcac
 300
 cagactcagc cagtaacacc gcgaaaaatc gtggcgcatg tcgacagggt gcaaaccgag
 360
 acgcagcacg ggtgcctgtc ggtggcgggc gag
 393

<210> 1858

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1858

Met	Leu	Ser	Met	Val	Ser	Ser	Ser	Gln	Asn	Gly	Asn	Arg	Ser	Arg	Arg
1				5				10				15			
Ser	Asn	Ser	Ser	Leu	Pro	Pro	Ser	Thr	Ser	Gly	Ile	Ala	Pro	Ala	Thr
				20				25				30			
Thr	Ser	Ala	Pro	Arg	Ser	Ser	His	His	Arg	Pro	Leu	Met	Leu	Arg	His
		35					40				45				
Ser	Ile	Pro	Ile	Arg	Cys	Ala	Ser	Thr	Asn	Arg	Ser	Trp	Ser	Arg	His
	50				55				60						
Ala	Ala	His	Leu	Pro	Thr	Gly	Glu	Ser	Pro	Asp	Ser	Ala	Ser	Asn	Thr
65			70						75					80	
Ala	Lys	Asn	Arg	Gly	Ala	Cys	Arg	Gln	Gly	Ala	Asn	Arg	Asp	Ala	Ala
			85					90					95		
Arg	Val	Pro	Val	Gly	Gly	Gly	Arg								
				100											

<210> 1859

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1859

nagatctggc gcctcgctac caacttcctc tacttccgca agatggattt ggattttctg
 60
 ttccacatgt tttttctcgc acgatactgc aagcttctgg aggagaactc atttagagga
 120
 agaactgccg acttttttta catgctcttg ttgggtgcta ctgtcctaac tagcattggt
 180
 ctgatcggag ggatgatacc ttacatttcc gagacatttg ccagaattct gttcctgagc
 240
 aattcattga cgtttatgat ggtttatgtc tggagcaagc acaatcctat catccatag
 300
 agcaatctgg gcctgttcac ctttacgggt gcatacttac catgg
 345

<210> 1860
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 1860
 Xaa Ile Trp Arg Leu Val Thr Asn Phe Leu Tyr Phe Arg Lys Met Asp
 1 5 10 15
 Leu Asp Phe Leu Phe His Met Phe Phe Leu Ala Arg Tyr Cys Lys Leu
 20 25 30
 Leu Glu Glu Asn Ser Phe Arg Gly Arg Thr Ala Asp Phe Phe Tyr Met
 35 40 45
 Leu Leu Phe Gly Ala Thr Val Leu Thr Ser Ile Val Leu Ile Gly Gly
 50 55 60
 Met Ile Pro Tyr Ile Ser Glu Thr Phe Ala Arg Ile Leu Phe Leu Ser
 65 70 75 80
 Asn Ser Leu Thr Phe Met Met Val Tyr Val Trp Ser Lys His Asn Pro
 85 90 95
 Ile Ile His Met Ser Asn Leu Gly Leu Phe Thr Phe Thr Ala Ala Tyr
 100 105 110
 Leu Pro Trp
 115

<210> 1861
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 1861
 gcgttgactg tagtgagtga cgaagctgat atacaaaatg cgccgggctg tagaaaagcc
 60
 aatagtgagc ttcattcagt cggcttaggt gttatgaact tacatggcta tcttgctaaa
 120
 aacaaaattg gctatgagtc ggaagaagct aaagattttg ctaatatatt ctttatgatg
 180
 atgaattact attcacttga aagatcaatg caaatagcaa aagaaagaca ggaaacgttt
 240
 aaagactttg ataagtcaga ttatgcaa atgaaaatatt tcgaatttta tacttcgcaa
 300
 tcatttgaac cgaaatacga aaaagtacgt aaattatttg atggttttaga aatcccaacg
 360
 cctgaagatt ggaaagcatt gcaaaaagaa gttgaaactc acggtttatt ccattgcttat
 420
 cgtttagcga ttgca
 435

<210> 1862
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 1862
 Ala Leu Thr Val Val Ser Asp Glu Ala Asp Ile Gln Asn Ala Pro Gly

```

      1           5           10           15
Val Arg Lys Ala Asn Ser Glu Leu His Ser Val Gly Leu Gly Val Met
      20           25           30
Asn Leu His Gly Tyr Leu Ala Lys Asn Lys Ile Gly Tyr Glu Ser Glu
      35           40           45
Glu Ala Lys Asp Phe Ala Asn Ile Phe Phe Met Met Met Asn Tyr Tyr
      50           55           60
Ser Leu Glu Arg Ser Met Gln Ile Ala Lys Glu Arg Gln Glu Thr Phe
      65           70           75           80
Lys Asp Phe Asp Lys Ser Asp Tyr Ala Asn Gly Lys Tyr Phe Glu Phe
      85           90           95
Tyr Thr Ser Gln Ser Phe Glu Pro Lys Tyr Glu Lys Val Arg Lys Leu
      100           105           110
Phe Asp Gly Leu Glu Ile Pro Thr Pro Glu Asp Trp Lys Ala Leu Gln
      115           120           125
Lys Glu Val Glu Thr His Gly Leu Phe His Ala Tyr Arg Leu Ala Ile
      130           135           140
Ala
145

```

<210> 1863

<211> 792

<212> DNA

<213> Homo sapiens

<400> 1863

```

nggatacctca cgcccgccat catacgtggg atacgttga gcaaatgcgt catgacgggg
60
tctcgcgcgt gctcactacc cacaacatgg atgaggctca acggctggct gatcacgtct
120
ggatcgtcga tcgcggcagg gtcgcaactc atggaactgt gccagagctc accgctgagt
180
cgagtttgga agatgtgttc ctcaactcaca ctagtgaccg cgcagcaggg aggaattgac
240
atgacgacac tcgatctccg ccccgcacct caggccgcac cggctgctgc acgctgctgc
300
aaccacgctc tcaccgaggt gcgtctggtg atgcgcaacg gtgagcagct gctactagct
360
ctcgtcattc ccatcgggat catcgctgcc gggcgcttcc tgggcggccg ggtcggactg
420
acgatggacg tcttagcacc ctcaagtctg gcgctcgcca tctggctgac atgtttcact
480
tcccaagcga tcatgaccgg ttttgaacgc cgttacgggg tgctcgaacg attgtccgca
540
accccgttag gtcggtcggg tctgctagct ggcaaggcga tggcttattc cgttatcagt
600
ctcgcctcagg tgatactgct tgatcatc tcttttagcgc tgggctggca cccccacggt
660
tccggcctgg cctggctccc aacctggtg agcgttgtgc tcgccatgat gacattcggg
720
ctcgcagcac tggcaatggc cggcgctggc aaagctgaag tcactctcgg actggccaac
780
ttggtataca tc
792

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<210> 1864
 <211> 264
 <212> PRT
 <213> Homo sapiens

<400> 1864
 Xaa Ile Leu Thr Pro Ala Ile Ile Arg Gly Ile Ser Leu Ser Lys Cys
 1 5 10 15
 Val Met Thr Gly Ser Pro Ser Cys Ser Leu Pro Thr Thr Trp Met Arg
 20 25 30
 Leu Asn Gly Trp Leu Ile Thr Ser Gly Ser Ser Ile Ala Ala Gly Ser
 35 40 45
 Gln Leu Met Glu Leu Cys Gln Ser Ser Pro Leu Ser Arg Val Trp Lys
 50 55 60
 Met Cys Ser Ser Leu Thr Leu Val Thr Ala Gln Gln Gly Gly Ile Asp
 65 70 75 80
 Met Thr Thr Leu Asp Leu Arg Pro Ala Pro Gln Ala Ala Pro Ala Ala
 85 90 95
 Ala Arg Val Arg Asn His Ala Leu Thr Glu Val Arg Leu Val Met Arg
 100 105 110
 Asn Gly Glu Gln Leu Leu Leu Ala Leu Val Ile Pro Ile Gly Ile Ile
 115 120 125
 Val Ala Gly Arg Phe Leu Gly Gly Arg Val Gly Leu Thr Met Asp Val
 130 135 140
 Leu Ala Pro Ser Val Leu Ala Leu Ala Ile Trp Ser Thr Cys Phe Thr
 145 150 155 160
 Ser Gln Ala Ile Met Thr Gly Phe Glu Arg Arg Tyr Gly Val Leu Glu
 165 170 175
 Arg Leu Ser Ala Thr Pro Leu Gly Arg Ser Gly Leu Leu Ala Gly Lys
 180 185 190
 Ala Met Ala Tyr Ser Val Ile Ser Leu Ala Gln Val Ile Leu Leu Val
 195 200 205
 Ile Ile Ser Leu Ala Leu Gly Trp His Pro His Gly Ser Gly Leu Ala
 210 215 220
 Trp Leu Pro Thr Leu Val Ser Val Val Leu Ala Met Met Thr Phe Gly
 225 230 235 240
 Leu Ala Ala Leu Ala Met Ala Gly Ala Gly Lys Ala Glu Val Thr Leu
 245 250 255
 Gly Leu Ala Asn Leu Val Tyr Ile
 260

<210> 1865
 <211> 717
 <212> DNA
 <213> Homo sapiens

<400> 1865
 ngccggctga tcaaacaact cacagacatg ggcttcccga gagagccagc tgaggaggcc
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 ttgaagagta acaatatgaa tcttgatcag gccatgagcg ctctgctgga aaagaagggtg
 120
 gacgtggaca agcgtgggct gggagtgacc gaccataatg gaatggccgc caagcccctc
 180

ggctgccgcc cgccaatctc caaagagtct tccgtggacc gccccaccct tcttgacaag
 240
 gatggcggcc tcgtggaaga gcccacgcct tcaccgttct tgccttcccc aagcctgaag
 300
 ctcccccttt cacacagtgc actccccagt caggccctgg gtgggggttg ctccgggctg
 360
 ggcatgcaaa acttgaattc ttctagacag ataccgagtg gcaatctggg tatgtttggc
 420
 aatagtggag cagcacaagc caggaccatg cagcagccgc cacagccacc agtgcagcct
 480
 ctttaactctt cccagcccag tctccgtgct caagtgcctc agtttctatc ccctcaggtt
 540
 caagcacagc ttttgagtt tgcagcaaaa aacattggtc tcaaccctgc actattaacc
 600
 tcgccaatta atcctcaaca tatgacgatg ttgaaccagc tctatcagct gcagctggca
 660
 taccaacgtt tacaaatcca gcagcagatg ttacaggccc agcgtaatgt gtccgga
 717

<210> 1866

<211> 239

<212> PRT

<213> Homo sapiens

<400> 1866

Xaa	Arg	Leu	Ile	Lys	Gln	Leu	Thr	Asp	Met	Gly	Phe	Pro	Arg	Glu	Pro
1				5					10					15	
Ala	Glu	Glu	Ala	Leu	Lys	Ser	Asn	Asn	Met	Asn	Leu	Asp	Gln	Ala	Met
			20					25					30		
Ser	Ala	Leu	Leu	Glu	Lys	Lys	Val	Asp	Val	Asp	Lys	Arg	Gly	Leu	Gly
		35					40					45			
Val	Thr	Asp	His	Asn	Gly	Met	Ala	Ala	Lys	Pro	Leu	Gly	Cys	Arg	Pro
	50					55					60				
Pro	Ile	Ser	Lys	Glu	Ser	Ser	Val	Asp	Arg	Pro	Thr	Leu	Leu	Asp	Lys
65				70					75					80	
Asp	Gly	Gly	Leu	Val	Glu	Glu	Pro	Thr	Pro	Ser	Pro	Phe	Leu	Pro	Ser
			85					90					95		
Pro	Ser	Leu	Lys	Leu	Pro	Leu	Ser	His	Ser	Ala	Leu	Pro	Ser	Gln	Ala
		100						105					110		
Leu	Gly	Gly	Val	Ala	Ser	Gly	Leu	Gly	Met	Gln	Asn	Leu	Asn	Ser	Ser
		115					120					125			
Arg	Gln	Ile	Pro	Ser	Gly	Asn	Leu	Gly	Met	Phe	Gly	Asn	Ser	Gly	Ala
	130					135					140				
Ala	Gln	Ala	Arg	Thr	Met	Gln	Gln	Pro	Pro	Gln	Pro	Pro	Val	Gln	Pro
145				150						155				160	
Leu	Asn	Ser	Ser	Gln	Pro	Ser	Leu	Arg	Ala	Gln	Val	Pro	Gln	Phe	Leu
			165						170				175		
Ser	Pro	Gln	Val	Gln	Ala	Gln	Leu	Leu	Gln	Phe	Ala	Ala	Lys	Asn	Ile
		180					185						190		
Gly	Leu	Asn	Pro	Ala	Leu	Leu	Thr	Ser	Pro	Ile	Asn	Pro	Gln	His	Met
	195						200					205			
Thr	Met	Leu	Asn	Gln	Leu	Tyr	Gln	Leu	Gln	Leu	Ala	Tyr	Gln	Arg	Leu
	210				215						220				
Gln	Ile	Gln	Gln	Gln	Met	Leu	Gln	Ala	Gln	Arg	Asn	Val	Ser	Gly	

225

230

235

<210> 1867
 <211> 518
 <212> DNA
 <213> Homo sapiens

<400> 1867
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 tccatgcatg ggacggcact tgggtccgag atcaggtagc caggcatgga aggaacatgg
 120
 gaggaagggg actgtctggt gcgccagtgt tgttcaagga ggatgtgaca agacaggcca
 180
 tctggttggc tggccctggt acccaacaac gtggtggcca aggccttggt cccggagagg
 240
 ttcttggggg ccagcagggg gctacatagg acatgggtgg ggaccccagc tccgagccca
 300
 cctctctctgc ctccaccctt tccaccnng cagccccgc ctctcccgca gaactctccc
 360
 caagccagac cgcctggacc ggctgcttaa gtcaggcttt gggacatacc ctgggaggaa
 420
 gcgaggtgct ttgcacccc aagtgatcat gttcccgctc ccagcctgcc aagggtgatgt
 480
 ggagcttggg gagcgggggc tggcagggct tttccgga
 518

<210> 1868
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 1868
 Gln Asp Arg Pro Ser Gly Trp Leu Ala Leu Leu Pro Asn Asn Val Val
 1 5 10 15
 Ala Lys Ala Leu Cys Pro Glu Arg Phe Leu Gly Ala Ser Arg Gly Leu
 20 25 30
 His Arg Thr Trp Val Gly Thr Pro Ala Pro Ser Pro Pro Leu Leu Pro
 35 40 45
 Pro Pro Leu Pro Pro Xaa Gln Pro Pro Pro Leu Pro Gln Asn Ser Pro
 50 55 60
 Gln Ala Arg Pro Pro Gly Pro Ala Ala
 65 70

<210> 1869
 <211> 436
 <212> DNA
 <213> Homo sapiens

<400> 1869
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 ccgtgacatg ccgagcaccg aaaccacact gtggattcgc gagctgagcc gcatcgaccg
 120

cgacgtgtcg actgccaccc actttcgttg gagcgacgac ggcaccgtgc taggtcagac
 180
 gaccgacgat ggcaccgagc ctgaggttgt tgccctgccca gcggtctact gccgtcgttg
 240
 cggccgcagc ggatggggag tccagctcgc cagcaccggc aataacctca gcgagaacaa
 300
 cgacagcatc cgacggaccc acgcggcaca cgacggtcgc ttccgagcct tgctttcggc
 360
 ccctcgagag ggagccagcg cggtcgacac cggcgaggcg acactgtcct tacgctggtt
 420
 cgacaccgtc aacagg
 436

<210> 1870

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1870

Met	Pro	Ser	Thr	Glu	Thr	His	Leu	Trp	Ile	Arg	Glu	Leu	Ser	Arg	Ile
1				5					10				15		
Asp	Arg	Asp	Val	Ser	Thr	Ala	Thr	His	Phe	Arg	Trp	Ser	Asp	Asp	Gly
			20					25					30		
Thr	Val	Leu	Gly	Gln	Thr	Thr	Asp	Asp	Gly	Thr	Glu	Pro	Glu	Val	Val
		35					40				45				
Ala	Leu	Pro	Ala	Val	Tyr	Cys	Arg	Arg	Cys	Gly	Arg	Ser	Gly	Trp	Gly
	50					55				60					
Val	Gln	Leu	Ala	Ser	Thr	Gly	Asn	Asn	Leu	Ser	Glu	Asn	Asn	Asp	Ser
65					70					75				80	
Ile	Arg	Arg	Thr	His	Ala	Ala	His	Asp	Gly	Arg	Phe	Arg	Ala	Leu	Leu
				85					90					95	
Ser	Ala	Pro	Arg	Glu	Gly	Ala	Ser	Ala	Val	Asp	Thr	Gly	Glu	Ala	Thr
			100					105					110		
Leu	Ser	Leu	Arg	Trp	Phe	Asp	Thr	Val	Asn	Arg					
		115					120								

<210> 1871

<211> 474

<212> DNA

<213> Homo sapiens

<400> 1871

nntgcagcgc cccgaggtcg atgtctccaa cgtctttgcc agccttgaca tggctagcga
 60
 gcccgcacctc gtccgtaccc tgctgaggca agcccaacaa tgaccgggga acagctcgcg
 120
 cattggatcg aggagtcgac gtcgacggtg tttttcggcg gcgccggaat gtccaccgaa
 180
 tcaggtattc cggactttcg ctcggctggc gggctttaca cactcagca tgacctgccc
 240
 ttccccgcgg agtacatgct cagtcacagc tgtttggttg agcatcccgc ggagttcttc
 300
 gacttctacc gcacctacct catccatcct caggccaggc ccaatgctgg tcacgtgcg
 360

ttggttgccct tggagcaggc tggggaactt tgcacgatca ttaccagaa tattgacggc
420
ctgcaccaag aagctgggtc tgcgcaggc attgagttgc atgggtcggc gcac
474

<210> 1872
<211> 125
<212> PRT
<213> Homo sapiens

<400> 1872
Met Thr Gly Glu Gln Leu Ala His Trp Ile Glu Glu Ser Thr Ser Thr
1 5 10 15
Val Phe Phe Gly Gly Ala Gly Met Ser Thr Glu Ser Gly Ile Pro Asp
20 25 30
Phe Arg Ser Ala Gly Gly Leu Tyr Thr Thr Gln His Asp Leu Pro Phe
35 40 45
Pro Ala Glu Tyr Met Leu Ser His Ser Cys Leu Val Glu His Pro Ala
50 55 60
Glu Phe Phe Asp Phe Tyr Arg Thr Tyr Leu Ile His Pro Gln Ala Arg
65 70 75 80
Pro Asn Ala Gly His Arg Ala Leu Val Ala Leu Glu Gln Ala Gly Glu
85 90 95
Leu Ser Thr Ile Ile Thr Gln Asn Ile Asp Gly Leu His Gln Glu Ala
100 105 110
Gly Ser Arg Gln Val Ile Glu Leu His Gly Ser Val His
115 120 125

<210> 1873
<211> 338
<212> DNA
<213> Homo sapiens

<400> 1873
nacgcgtaga aatgaagccc cagctggtca gagaccggaa atccggtagt gcacgggacg
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ggttcctcgc gggatctcgc aggggagacc cccacccggg aggactggag gcagcgcctc
120
tccgcctccg gcgcgcgcag cctatttccc tctttccaag gggccaatcc ccaccgcggc
180
ccgcaggggg cgcgctcaag gcaagggtccg cggcgagaac ggtgcccagt gggagcgaag
240
ggcgaggcca gcccttggtc cttggccggc agttcgggtc ccgcctccaa attttagtat
300
gcatatgagt caccaggaaa gttttttgaa acaaattt
338

<210> 1874
<211> 93
<212> PRT
<213> Homo sapiens

<400> 1874
Ser Pro Ser Trp Ser Glu Thr Gly Asn Pro Val Val His Gly Thr Gly

```

      1           5           10           15
Ser Leu Gly Asp Leu Gly Gly Glu Thr Pro Thr Arg Glu Asp Trp Arg
      20           25           30
Gln Arg Leu Ser Arg Pro Gly Ala Arg Ser Leu Phe Pro Ser Phe Gln
      35           40           45
Gly Ala Asn Pro His Arg Gly Pro Gln Gly Ala Arg Ser Arg Gln Gly
      50           55           60
Pro Arg Arg Glu Arg Cys Pro Val Gly Ala Lys Gly Glu Ala Ser Pro
      65           70           75           80
Trp Ser Leu Ala Gly Ser Ser Gly Pro Ala Ser Lys Phe
      85           90

```

<210> 1875
 <211> 366
 <212> DNA
 <213> Homo sapiens

```

<400> 1875
aagcttggcg tacaagtggg tcgtcggttc tcaggtgggt gagccgtgta tcacgatatg
60
ggcaatatct gcttctgctt cattacagaa gatgatggcg atagcttcg tgattttgga
120
aaattcacag aaccggtgat tgaagcactc cataaaatgg gagcaacagg ggcagagtta
180
caaggacgta acgaccttct catcgacgga aagaaattct ctggaaatgc gatgtactca
240
aacaatggcc gtttaacagc gcacggaaca ttaatgttgg atttagatgt gagcattttg
300
ccacaaattt tacgtccaaa acaagagaaa atcgagtcaa aaggaatcaa gtcggttcgt
360
tcacgc
366

```

<210> 1876
 <211> 122
 <212> PRT
 <213> Homo sapiens

```

<400> 1876
Lys Leu Gly Val Gln Val Val Arg Arg Phe Ser Gly Gly Gly Ala Val
      1           5           10           15
Tyr His Asp Met Gly Asn Ile Cys Phe Cys Phe Ile Thr Glu Asp Asp
      20           25           30
Gly Asp Ser Phe Arg Asp Phe Gly Lys Phe Thr Glu Pro Val Ile Glu
      35           40           45
Ala Leu His Lys Met Gly Ala Thr Gly Ala Glu Leu Gln Gly Arg Asn
      50           55           60
Asp Leu Leu Ile Asp Gly Lys Lys Phe Ser Gly Asn Ala Met Tyr Ser
      65           70           75           80
Asn Asn Gly Arg Leu Thr Ala His Gly Thr Leu Met Leu Asp Leu Asp
      85           90           95
Val Ser Ile Leu Pro Gln Ile Leu Arg Pro Lys Gln Glu Lys Ile Glu
      100          105          110
Ser Lys Gly Ile Lys Ser Val Arg Ser Arg

```

115

120

<210> 1877
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 1877
 acgcgtgagt ggtcgcaaat atgacgggca agaaacgctt agaaagaaac taccattaa
 60
 cgagggttatg caaattgcag aaatctctct atcggattgt ggctatatta ttcatcttt
 120
 ccaagctgct ggaccaaggg ctgtagggtt gcaacgacct attatatctg aacatttttt
 180
 tcaatttgac ccatttgata aacgacattg ggttgcttca catcatttac cacacgtgc
 240
 gacagctgct ttcacttccg gatttgaaga ttgcgctgga ttagtttcag atactgccgg
 300
 atcgaacact cttgatggaa aggactatgt tgaaagctgc tgcaatgcta ttccacg
 357

<210> 1878
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 1878
 Met Gln Ile Ala Glu Ile Ser Leu Ser Asp Cys Gly Tyr Ile Ile Ser
 1 5 10 15
 Ser Phe Gln Ala Ala Gly Pro Arg Ala Val Gly Leu Gln Arg Pro Ile
 20 25 30
 Ile Ser Glu His Phe Phe Gln Phe Asp Pro Phe Asp Lys Arg His Trp
 35 40 45
 Val Val Ser His His Leu Pro His Ala Ala Thr Ala Ala Phe Thr Ser
 50 55 60
 Gly Phe Glu Asp Cys Ala Gly Leu Val Ser Asp Thr Ala Gly Ser Asn
 65 70 75 80
 Thr Leu Asp Gly Lys Asp Tyr Val Glu Ser Cys Cys Asn Ala Ile Pro
 85 90 95

<210> 1879
 <211> 1062
 <212> DNA
 <213> Homo sapiens

<400> 1879
 nacgcgtgga tgctccttgg acggcttttt cgtggtagag gggtcccggg gcgcgccgca
 60
 tccctgggaa gtagctgaag agaaggcaca ggaagagtcg cctccactga tggctctcct
 120
 gtccctccca caggctctga cgcccgtctt gcggcttcgg tgtttgaaca ggccacagtc
 180
 caggagcgct tacattcagg agctccgcgt agcacctgcc caaccaaact cagccctccg
 240

ttaagatcct gggtccatgc cgcagtagga cagcaggccc aagtctgcac atcccagtga
 300
 tgcaccatgc caatagtga taagttgaag gaggccctga aaccggccg caaggactcg
 360
 gctgatgatg gagaactggg gaagcttctt gcctcctctg ccaagaaggt ccttttacag
 420
 aaaatcgagt tcgagccagc cagcaagagc ttctcctacc agctggaggc cttaaagagc
 480
 aaatatgtgt tgctcaaccc caaaacagag ggagctagtc gccacaagag tggagatgac
 540
 ccaccggcca ggagacaggg cagtgaacac acgtatgaga gctgtggtga cggagtccca
 600
 gccccgcaga aagtgtttt cccacaggag cgactgtctc tgaggtggga gcgggtcttc
 660
 cgctgtggcg caggactcca caacctggc aacacctgct ttctcaatgc caccatccag
 720
 tgcttgacct acacaccacc tctagccaac tacctgctct ccaaggagca tgctcgagc
 780
 tgccaccagg gaagcttctg catgctgtgt gtcatgcaga accacattgt ccaggccttc
 840
 gccaacagcg gcaacgccat caagccgctc tccttcattc gagacctgaa aaagatcgcc
 900
 cgacattcc gctttgggaa ccaggaggac gcgcatgagt tcctgcggtg caccatcgac
 960
 gccatgcaga aagcctgcct gaatggctgt gccaaagttg atcgtcaaac gcaggctact
 1020
 accttggtcc atcaaatttt tggagggtat ctcagatcac gc
 1062

<210> 1880

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1880

Met	Pro	Ile	Val	Asp	Lys	Leu	Lys	Glu	Ala	Leu	Lys	Pro	Gly	Arg	Lys	1	5	10	15
Asp	Ser	Ala	Asp	Asp	Gly	Glu	Leu	Gly	Lys	Leu	Leu	Ala	Ser	Ser	Ala	20	25	30	
Lys	Lys	Val	Leu	Leu	Gln	Lys	Ile	Glu	Phe	Glu	Pro	Ala	Ser	Lys	Ser	35	40	45	
Phe	Ser	Tyr	Gln	Leu	Glu	Ala	Leu	Lys	Ser	Lys	Tyr	Val	Leu	Leu	Asn	50	55	60	
Pro	Lys	Thr	Glu	Gly	Ala	Ser	Arg	His	Lys	Ser	Gly	Asp	Asp	Pro	Pro	65	70	75	80
Ala	Arg	Arg	Gln	Gly	Ser	Glu	His	Thr	Tyr	Glu	Ser	Cys	Gly	Asp	Gly	85	90	95	
Val	Pro	Ala	Pro	Gln	Lys	Val	Leu	Phe	Pro	Thr	Glu	Arg	Leu	Ser	Leu	100	105	110	
Arg	Trp	Glu	Arg	Val	Phe	Arg	Val	Gly	Ala	Gly	Leu	His	Asn	Leu	Gly	115	120	125	
Asn	Thr	Cys	Phe	Leu	Asn	Ala	Thr	Ile	Gln	Cys	Leu	Thr	Tyr	Thr	Pro	130	135	140	
Pro	Leu	Ala	Asn	Tyr	Leu	Leu	Ser	Lys	Glu	His	Ala	Arg	Ser	Cys	His				

```

145          150          155          160
Gln Gly Ser Phe Cys Met Leu Cys Val Met Gln Asn His Ile Val Gln
          165          170          175
Ala Phe Ala Asn Ser Gly Asn Ala Ile Lys Pro Val Ser Phe Ile Arg
          180          185          190
Asp Leu Lys Lys Ile Ala Arg His Phe Arg Phe Gly Asn Gln Glu Asp
          195          200          205
Ala His Glu Phe Leu Arg Tyr Thr Ile Asp Ala Met Gln Lys Ala Cys
          210          215          220
Leu Asn Gly Cys Ala Lys Leu Asp Arg Gln Thr Gln Ala Thr Thr Leu
225          230          235          240
Val His Gln Ile Phe Gly Gly Tyr Leu Arg Ser Arg
          245          250

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<210> 1881

<211> 358

<212> DNA

<213> Homo sapiens

<400> 1881

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natcaccatg gatggacgcc ggcaaagcaa catcaatcga tgtcaagcca cagacatctc
60
aaatccctgc agaaccgcaa agtttggcag agaagaagga tgaatgggag atcgcataca
120
tcaacacgaa gattaacgac gtctacaacc ctctcaacaa caatgtggac tggttaagca
180
cgagaattga tctgctacag caagatttgg acaccactcg caagaaggat ctaaaaccag
240
ccacatcgat cgatatctgc accatcacat cgatcgatag caagttcgta gccatggaag
300
ataggttaca atcttataag gatatgcacg accgtttcac ctcacctatc aggcgata
358

```

<210> 1882

<211> 115

<212> PRT

<213> Homo sapiens

<400> 1882

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Met Asp Ala Gly Lys Ala Thr Ser Ile Asp Val Lys Pro Gln Thr Ser
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Gln Ile Pro Ala Glu Pro Gln Ser Leu Ala Glu Lys Lys Asp Glu Trp
20     25     30
Glu Ile Ala Tyr Ile Asn Thr Lys Ile Asn Asp Val Tyr Asn Pro Leu
35     40     45
Asn Asn Asn Val Asp Trp Leu Ser Thr Arg Ile Asp Leu Leu Gln Gln
50     55     60
Asp Leu Asp Thr Thr Arg Lys Lys Asp Leu Lys Pro Ala Thr Ser Ile
65     70     75     80
Asp Ile Cys Thr Ile Thr Ser Ile Asp Ser Lys Phe Val Ala Met Glu
85     90     95
Asp Arg Leu Gln Ser Tyr Lys Asp Met His Asp Arg Phe Thr Ser Pro
100    105    110
Ile Arg Arg

```

115

<210> 1883
 <211> 367
 <212> DNA
 <213> Homo sapiens

<400> 1883
 ggatcctatc atgaatctgc actctgacca gggaagtaac tcccttggt gctcagactt
 60
 gggctgggag aatgatacta agacaccaga catcacatcc attgctccca tccccactat
 120
 tgctgaaggc gatgagtctg tatttgtcaa ctccaattca aacagctcga tgggtgcctcc
 180
 tgtcctggag aacaatgctg ttgatctcac tgatgggctg acagatttgg aatcctatat
 240
 gaggtttctt atggatggcg gngcaagtga ttcaattgat agccttctga accttgatgg
 300
 atcacaggat cttggtagca atatggacct ctggaccttc gatgacatgc ccatcgctgg
 360
 cgatttn
 367

<210> 1884
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1884
 Met Asn Leu His Ser Asp Gln Gly Ser Asn Ser Leu Gly Cys Ser Asp
 1 5 10 15
 Leu Gly Trp Glu Asn Asp Thr Lys Thr Pro Asp Ile Thr Ser Ile Ala
 20 25 30
 Pro Ile Pro Thr Ile Ala Glu Gly Asp Glu Ser Val Phe Val Asn Ser
 35 40 45
 Asn Ser Asn Ser Ser Met Val Pro Pro Val Leu Glu Asn Asn Ala Val
 50 55 60
 Asp Leu Thr Asp Gly Leu Thr Asp Leu Glu Ser Tyr Met Arg Phe Leu
 65 70 75 80
 Met Asp Gly Gly Ala Ser Asp Ser Ile Asp Ser Leu Leu Asn Leu Asp
 85 90 95
 Gly Ser Gln Asp Leu Gly Ser Asn Met Asp Leu Trp Thr Phe Asp Asp
 100 105 110
 Met Pro Ile Ala Gly Asp Xaa
 115

<210> 1885
 <211> 392
 <212> DNA
 <213> Homo sapiens

<400> 1885
 nacgcgtatt cgcaaagaat gtctttgcgg cacagagaca gtcgtcgtec tcgacaccat
 60

gttcgacgat ctcggcatgt tgggaacccg gtgatttctc gcctgcggcg cacctcgtgg
 120
 ctgcgtagta cagctgctgt tgccgccggg gccgcgaccg gtaccgggtt ccaaccactg
 180
 aactgggtgga tcctcgctcat tcccgggtctc gctgcgctca tcctgctggt ggcgaacgcc
 240
 actggtcggg ccgcggcagg actgggggat ctcttcggca tcggtctggt taccaccacc
 300
 atttcctggg taggcgtcat cggcccgcg gtggcgatac ttctcatcgc tgtcatggcg
 360
 ttgtggtgtc tgctggccgg gtggacgatt cg
 392

<210> 1886
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1886
 Xaa Ala Tyr Ser Gln Arg Met Ser Leu Arg His Arg Asp Ser Arg Arg
 1 5 10 15
 Pro Arg His His Val Arg Arg Ser Arg His Val Gly Asn Pro Val Ile
 20 25 30
 Ser Arg Leu Arg Arg Thr Ser Trp Leu Arg Ser Thr Ala Ala Val Ala
 35 40 45
 Ala Gly Ala Ala Thr Gly Thr Gly Phe Gln Pro Leu Asn Trp Trp Ile
 50 55 60
 Leu Val Ile Pro Gly Leu Ala Ala Leu Ile Leu Leu Val Arg Asn Ala
 65 70 75 80
 Thr Gly Arg Ala Ala Ala Gly Leu Gly Tyr Leu Phe Gly Ile Gly Leu
 85 90 95
 Phe Thr Thr Thr Ile Ser Trp Val Gly Val Ile Gly Pro Pro Val Ala
 100 105 110
 Ile Leu Leu Ile Ala Val Met Ala Leu Trp Cys Leu Leu Ala Gly Trp
 115 120 125
 Thr Ile
 130

<210> 1887
 <211> 363
 <212> DNA
 <213> Homo sapiens

<400> 1887
 cgcgagttca ttcggacctt tgaggacgtt gccaaagcgtc tcaatgggga ccagccgatc
 60
 gacttcttgg tgcagggaac tttatatccc gatgtcgtcg agtctggtgg cgggtgagggc
 120
 gctgccaaata tcaagagtca ccataatgtt ggtgggctcc ctgacgacct ccagttcagt
 180
 ctcgttgagc cattgcgcac cctctttaag gacgaggtgc gagccgtcgg actcgaactt
 240
 ggtctgcccg aggacatcgt ctggcgctcag cccttcccgg gcccggggct ggctatccgc
 300

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<210> 1888
<211> 121
<212> PRT
<213> Homo sapiens
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<210> 1889
<211> 530
<212> DNA
<213> Homo sapiens
```

<210> 1890

<211> 176
 <212> PRT
 <213> Homo sapiens

<400> 1890
 Ala Pro Asp Leu Leu Met Ala Arg Ile Ala Thr Ala Thr Gln Ser Ile
 1 5 10 15
 Arg Leu Gly Ser Gly Gly Val Met Ala Met His Tyr Gly Ser Leu Gln
 20 25 30
 Ile Ala Glu Arg Phe Ser Thr Leu Thr Ala Leu Phe Gly Asp Arg Ile
 35 40 45
 Asp Met Gly Leu Gly Arg Ala Pro Gly Gly Asp Met Leu Ser Ala His
 50 55 60
 Ala Leu Asn Gln Gly Gln Val Ile Arg Pro Glu Ala Ile Asn Ser Leu
 65 70 75 80
 Ile Ala Glu Thr Val Gly Phe Val Arg Glu Met Leu Pro Ser Lys His
 85 90 95
 Pro Tyr Ala Lys Val Val Val Thr Pro Ala Gly Gln Ile Gln Pro Gln
 100 105 110
 Thr Trp Leu Leu Gly Ser Ser Gly Gln Ser Ala Ala Trp Ala Gly Glu
 115 120 125
 Gln Gly Met Asp Tyr Ala Tyr Ala Gln Phe Phe Thr Gly Arg Gln Asp
 130 135 140
 Thr Gly Ile Met Asp His Tyr Arg Ala His Leu Ser Asp Gly Phe Pro
 145 150 155 160
 Gly Arg Thr Leu Ser Ala Val Cys Val Ser Ala Ala Pro Thr Arg Pro
 165 170 175

<210> 1891
 <211> 423
 <212> DNA
 <213> Homo sapiens

<400> 1891
 agatctcagg gagacagagg ggcccgggat aggaagaata tgtgggcacc tctccacag
 60
 tcctccatct gcacaaggct acccactctg cagatggccc ctgcttgag agagatccag
 120
 cgtcaattta cagaggcagc ccagcttctt atcaactttc tggcctggct taacggtgta
 180
 atgggcaggg ggcaaggcct tgaccacact catgtttctc ccccggcctc ctccactctg
 240
 ggattttgta ccggtatggg gaggcactac ggttgcagat ttagcttttc agcgtggata
 300
 caagcaccca agtgtcccag accacagcag aaaccgtgtt gctgccgttt ccaacctgct
 360
 gatttgggtct cttgctgccg ttctgaccaa cagaattgct actgactgac aaatcccttg
 420
 tgc
 423

<210> 1892
 <211> 121
 <212> PRT

<213> Homo sapiens

<400> 1892

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Met Trp Ala Pro Leu Pro Gln Ser Ser Ile Cys Thr Arg Leu Pro Thr
 1           5           10           15
Leu Gln Met Ala Pro Ala Cys Arg Glu Ile Gln Arg Gln Phe Thr Glu
          20           25           30
Ala Ala Gln Leu Pro Ile Asn Phe Leu Ala Trp Leu Asn Gly Val Met
          35           40           45
Gly Arg Gly Gln Gly Leu Asp His Thr His Val Ser Pro Pro Ala Ser
          50           55           60
Ser Thr Leu Gly Phe Cys Thr Gly Met Gly Arg His Tyr Gly Cys Arg
65           70           75           80
Phe Ser Phe Ser Ala Trp Ile Gln Ala Pro Lys Cys Pro Arg Pro Gln
          85           90           95
Gln Lys Pro Cys Cys Cys Arg Phe Gln Pro Ala Asp Leu Val Ser Cys
          100          105          110
Cys Arg Ser Asp Gln Gln Asn Cys Tyr
          115          120

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<210> 1893

<211> 886

<212> DNA

<213> Homo sapiens

<400> 1893

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accggtggtg ctgaaccggc ccgagttgcc ctccctagcc ggatatacgt cgagggacgt
60
catgacgctg aactcgtcga aaagatatgg ggcgacgacc tgcgccacgt cggggtcggt
120
gtggaataca tgggtggcat ggacgacctc gtcgggatcg tcgccgagtt taagcctggt
180
ccggggcatc gccttggcgt gttggttgac cacctcgttg ccgacaccaa agagtcacgg
240
gtagcggacg aagtacgtcg tgggtgggtat agcgagtatg tcatgattac cggtcacgcg
300
tttattgaca tctggcaggc catcaaacct caacgaattg gccgtcaaga atggcctgag
360
gtccccgatg acgaagactt caaactcggc accctgaagc gtctgggcct gcctcactcg
420
acccaagctg acgtcggtaa ggccctggcag gccatgctgg cacgagtgcg cgactggcac
480
gatttagacc cccgctttaa cacggagatg gagaaactta tcgatttcgt cacgcgtgac
540
catgtcgacg agctggacaa tggggagatg gcatgagtat tgacgtcgac acggtgtctg
600
acctcatccg ggatgtgagt gccaggggta tcgatccccg gttccggacc ctccacgatc
660
atcaaatacca ccagaaaaag cccggggact tcgttactga tgccgatcgt caggccgagt
720
gcgagctggg tgccgctgtg accaagtatg ccggcggtat tgtcgtgggg gaggaatcag
780
ccttcgccga cccaaccatc cttgatgccg tttccgatgc tgacctggcc tgggtcatcg
840

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acccattga tggcactaag aacttcgtgc acgggtctgt tgatca
886

<210> 1894
<211> 191
<212> PRT
<213> Homo sapiens

<400> 1894
Thr Gly Gly Ala Glu Pro Ala Arg Val Ala Leu Pro Ser Arg Ile Tyr
1 5 10 15
Val Glu Gly Arg His Asp Ala Glu Leu Val Glu Lys Ile Trp Gly Asp
20 25 30
Asp Leu Arg His Val Gly Val Val Glu Tyr Met Gly Gly Met Asp
35 40 45
Asp Leu Val Gly Ile Val Ala Glu Phe Lys Pro Gly Pro Gly His Arg
50 55 60
Leu Gly Val Leu Val Asp His Leu Val Ala Asp Thr Lys Glu Ser Arg
65 70 75 80
Val Ala Asp Glu Val Arg Arg Gly Gly Tyr Ser Glu Tyr Val Met Ile
85 90 95
Thr Gly His Arg Phe Ile Asp Ile Trp Gln Ala Ile Lys Pro Gln Arg
100 105 110
Ile Gly Arg Gln Glu Trp Pro Glu Val Pro Met Asp Glu Asp Phe Lys
115 120 125
Leu Gly Thr Leu Lys Arg Leu Gly Leu Pro His Ser Thr Gln Ala Asp
130 135 140
Val Gly Lys Ala Trp Gln Ala Met Leu Ala Arg Val Arg Asp Trp His
145 150 155 160
Asp Leu Asp Pro Arg Phe Asn Thr Glu Met Glu Lys Leu Ile Asp Phe
165 170 175
Val Thr Arg Asp His Val Asp Glu Leu Asp Asn Gly Glu Met Ala
180 185 190

<210> 1895
<211> 2555
<212> DNA
<213> Homo sapiens

<400> 1895
nntcatgatt tttggaggtg ggtgtacct cctgaacttc tagctttcaa gttgtggctg
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ttttttgttt ttgtttttgt ttttgttttc tttagaattt ttcctgttt cccaccttct
120
cttccccgtg tgccaagggtc taactcactg tagtctggat gtgggtgtat gttcatgtac
180
acaacttttag aaagttgctt gcagaacaaa aaggctacac aaaagcccac tggctctcaa
240
taccctcaag tggatggcag aggtctttgt tgaaagtggg caatttgcaa tctttgcatt
300
aggatttcag atgcatgcca ggtttccact gattgccaga actcgagatc actacacatg
360
gatccccaaa atcaacatgg cagtggcagt tcgttagttg tgatccagca gccttctttg
420

gatagccgctc agagattaga ctatgagaga gagattcagc ctactgctat tttgtcctta
480
gaccagatca aggccataag aggcagcaat gaatacacag aagggccttc ggtggtgaaa
540
agacctgctc ctcgacagc accaagacaa gaaaagcatg aaaggactca tgaaatcata
600
ccaattaatg tgaataataa ctacgagcac agacacacaa gccacctggg acatgcagta
660
ctcccaagta atgccagggg ccccatcttg agcagatcaa ccagcactgg aagtgcagcc
720
agctctggga gcaacagcag tgccctctct gaacaggagc tggtaggaag gtcaccacca
780
accagaccag tccctgggtca taggtctgaa agggcaatcc ggacctgagc caagcaactg
840
attgtggatg acttgaaggg ttccttgaaa gaggacctga cacagcacia gtccatttgt
900
gaacagtgtg ggaagtgcaa gtgtggagaa tgcactgctc ccaggaccct accatcctgt
960
ttggcctgta accggcagtg cctttgctct gctgagagca tgggtggaata tggaaacctgc
1020
atgtgcttag tcaagggtcat cttctaccac tgctccaatg acgacgaagg ggattcctat
1080
tcagataatc cttgctcctg ttcacaatca cactgctgct ctagatacct gtgtatggga
1140
gccatgtctt tatttttacc ttgcttactc tgttatctc ctgctaaagg atgcctgaag
1200
ctgtgcagga ggtgttatga ctggatccat cggccagggt gcagatgtaa gaactccaac
1260
actgtctatt gtaagctgga gagctgcccc tcccggggtc agggtaaacc atcatgattt
1320
ttggagggtg gttgtacctc ctgaacttct agctttcaag ttgtggctgt tttttgtttt
1380
tgtttttgtt tttgttttct ttagaatttt tccctgtttc ccaccttctc tttccctgtt
1440
gccaagggtc aactcatgga tttttctctt tctcatgga tgatcttcag caagagtgga
1500
ctgggaagct gcacctggct cccactttca acaagagcct ctgccatcca cttgagggtta
1560
ttgagagcca gtgggctttt gtgtagcctt tttgttctgc aagcaacttt ctaaagtgtt
1620
gtacatgaac atacaccac atccagacta cagtgattta gagttgtttt gattgggtac
1680
cgtgggagca gggaaattgg ttttttaaaa agcaactgtt taattgctta aataagctat
1740
gtattaaatc tgtctccagt tagggctatc ttcctagcat agggccctta agtagcatgg
1800
gggatataat ttttctata acgtaaaaat tttcctttta ccaactgccct ctcccttctc
1860
cttcaagggt ctttccccct cagttttgtt gttgtcttac tctggagatg ccaagtgtat
1920
tttttcttct tatgtaattt tagattcgcc ttacaatgta aatcttcaca ttggagataa
1980
tattggttgg accttgccca tcttcactct agccttcgta tttgtgaagg actcagccac
2040

ctctcttctt caccatgc ttctaccaa atttttgttg tcattgaggg cacttggata
 2100
 actcaagttg atatttatag ctgatcaatc tatatgtgtc acagaactat gctgcctaaa
 2160
 gtgatcttgg ctcttaatg gtccttttgg ccccttggat agttaacagc tgagtaattc
 2220
 taatctcttc tgtgttttcc ttgccttaac cacaaattgt ggtgcttttt gtatatttta
 2280
 tgtataaatc acaaagttga attctgacta tttttaagac aaaagtctgt taaacttttt
 2340
 tattgtaaag aatattttatt atgcgaatct ctattatttt atggtattta ttgcaaaaga
 2400
 ctgttgaaat gtactcatgt ttgaatataa caaaatatca atacttaacg gaaaataagg
 2460
 tgacacgaag aaagtacata tgtaactat aatgcagaaa atatattaat taatgaaaaa
 2520
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa
 2555

<210> 1896
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1896
 Cys Glu Gln Cys Gly Lys Cys Lys Cys Gly Glu Cys Thr Ala Pro Arg
 1 5 10 15
 Thr Leu Pro Ser Cys Leu Ala Cys Asn Arg Gln Cys Leu Cys Ser Ala
 20 25 30
 Glu Ser Met Val Glu Tyr Gly Thr Cys Met Cys Leu Val Lys Gly Ile
 35 40 45
 Phe Tyr His Cys Ser Asn Asp Asp Glu Gly Asp Ser Tyr Ser Asp Asn
 50 55 60
 Pro Cys Ser Cys Ser Gln Ser His Cys Cys Ser Arg Tyr Leu Cys Met
 65 70 75 80
 Gly Ala Met Ser Leu Phe Leu Pro Cys Leu Leu Cys Tyr Pro Pro Ala
 85 90 95
 Lys Gly Cys Leu Lys Leu Cys Arg Arg Cys Tyr Asp Trp Ile His Arg
 100 105 110
 Pro Gly Cys Arg Cys Lys Asn Ser Asn Thr Val Tyr Cys Lys Leu Glu
 115 120 125
 Ser Cys Pro Ser Arg Gly Gln Gly Lys Pro Ser
 130 135

<210> 1897
 <211> 938
 <212> DNA
 <213> Homo sapiens

<400> 1897
 cgtcatggct gctacgtgtg cggaagagc ttgacctggc gctccacact ggtggagcac
 60
 gtctacagtc acactggcga gaagcccttc cactgcactg actgcggcaa gggcttcggc
 120

cacgcttcct ccctgagcaa acaccggggc atccatcgtg gggagcggcc ccaccgctgt
 180
 ctggagtgtg gccggggcctt cacgcagcgc tcggcgctga cttcgcacct gcgcgtccac
 240
 accggcgaga aaccctatgg ctgcgccgac tgtggccgcc gcttcagcca gagctctgcc
 300
 ctctaccagc accggcgcggt gcacagcggc gagacccccct tcccctgccc ggactgtggc
 360
 cgcgccttcg cctacccctc ggacctgagg cgccacgtgc gcatccacac gggcgagaag
 420
 ccctaccctt gccagactg tgggcgcgcg ttttcctcct cctccctgct ggtcagtcac
 480
 cggcggggcac actccggcga gtgcccctat gtttgtgacc agtgtggcaa acgtttctcc
 540
 cagcgcaaga acctctccca gcaccaggtc atccatacag gggagaagcc ctatcactgc
 600
 cctgactgtg gtcgctgctt ccggaggagc cggtccttgg ccaatcaccg gaccacacac
 660
 acaggtgaaa aacccacca gtgccctagc tgtggacgtc gcttcgccta cccctccctg
 720
 ctggccagcc accggcgcggt gcactcgggc gagcggccct atgcctgcca cctttgctcc
 780
 aagcgttttg ctcaagtggag ccacctggcc cagcaccagc tgctgcacac gggggagaag
 840
 cctttccctt gcctcgagtg tggccgggct tccgccagag gtggtctctg gctgtccaca
 900
 agtgtagccc caaggcccca aactgtagcc ctagatct
 938

<210> 1898
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 1898
 Arg His Gly Cys Tyr Val Cys Gly Lys Ser Phe Ala Trp Arg Ser Thr
 1 5 10 15
 Leu Val Glu His Val Tyr Ser His Thr Gly Glu Lys Pro Phe His Cys
 20 25 30
 Thr Asp Cys Gly Lys Gly Phe Gly His Ala Ser Ser Leu Ser Lys His
 35 40 45
 Arg Ala Ile His Arg Gly Glu Arg Pro His Arg Cys Leu Glu Cys Gly
 50 55 60
 Arg Ala Phe Thr Gln Arg Ser Ala Leu Thr Ser His Leu Arg Val His
 65 70 75 80
 Thr Gly Glu Lys Pro Tyr Gly Cys Ala Asp Cys Gly Arg Arg Phe Ser
 85 90 95
 Gln Ser Ser Ala Leu Tyr Gln His Arg Arg Val His Ser Gly Glu Thr
 100 105 110
 Pro Phe Pro Cys Pro Asp Cys Gly Arg Ala Phe Ala Tyr Pro Ser Asp
 115 120 125
 Leu Arg Arg His Val Arg Ile His Thr Gly Glu Lys Pro Tyr Pro Cys
 130 135 140
 Pro Asp Cys Gly Arg Arg Phe Ser Ser Ser Ser Leu Leu Val Ser His


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145          150          155          160
Arg Arg Ala His Ser Gly Glu Cys Pro Tyr Val Cys Asp Gln Cys Gly
          165          170          175
Lys Arg Phe Ser Gln Arg Lys Asn Leu Ser Gln His Gln Val Ile His
          180          185          190
Thr Gly Glu Lys Pro Tyr His Cys Pro Asp Cys Gly Arg Cys Phe Arg
          195          200          205
Arg Ser Arg Ser Leu Ala Asn His Arg Thr Thr His Thr Gly Glu Lys
          210          215          220
Pro His Gln Cys Pro Ser Cys Gly Arg Arg Phe Ala Tyr Pro Ser Leu
225          230          235          240
Leu Ala Ser His Arg Arg Val His Ser Gly Glu Arg Pro Tyr Ala Cys
          245          250          255
Asp Leu Cys Ser Lys Arg Phe Ala Gln Trp Ser His Leu Ala Gln His
          260          265          270
Gln Leu Leu His Thr Gly Glu Lys Pro Phe Pro Cys Leu Glu Cys Gly
          275          280          285
Arg Ala Ser Ala Arg Gly Gly Leu Trp Leu Ser Thr Ser Val Ala Pro
          290          295          300
Arg Pro Gln Thr Val Ala Leu Asp
305          310

```

<210> 1899
 <211> 508
 <212> DNA
 <213> Homo sapiens

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<400> 1899
aaatttgcc t ccctaattgg caaggtgcaa gccctggaac agcgcgacca gctgctggag
60
acacgctgga gcttcctgca gggccaggac tcagccatct tcgacctcgg gcattcttat
120
gaggaaatat caggccggct gcgaggaggaa ctgggcaaaa gggacaggaa ccgggggagcag
180
ctggaggcca ccctgctgca ggtgttgaaa aaggtggagg agtttcgaat caggtattga
240
gatgagatct ccaagcgac agacatggag ttcacctttg ttcagctgaa gaaggacctg
300
gatgcagagt gtcttcatcg gactgaactg gaaaccaagt taaaaagcct ggagagcttc
360
gtggagttga tgaaaaccat ctatgagcag gagctgaagg acctggcagc acaggtgaag
420
gatgtgtcgg tgaccgtcgg catggacagc cgctgccaca tcgacctgag cggcatcgtg
480
gaggaggtga aggcccagta tgacgccg
508

```

<210> 1900
 <211> 79
 <212> PRT
 <213> Homo sapiens

```

<400> 1900
Lys Phe Ala Ser Leu Ile Gly Lys Val Gln Ala Leu Glu Gln Arg Asp

```

```

      1           5           10           15
Gln Leu Leu Glu Thr Arg Trp Ser Phe Leu Gln Gly Gln Asp Ser Ala
      20           25           30
Ile Phe Asp Leu Gly His Leu Tyr Glu Glu Ile Ser Gly Arg Leu Arg
      35           40           45
Arg Glu Leu Gly Gln Arg Asp Arg Asn Arg Gly Gln Leu Glu Ala Thr
      50           55           60
Leu Leu Gln Val Leu Lys Lys Val Glu Glu Phe Arg Ile Arg Tyr
      65           70           75

```

<210> 1901

<211> 453

<212> DNA

<213> Homo sapiens

<400> 1901

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acgcgtggac cacgatgcgc cggatcgggc tcggcgccat gcacacctcg gacctggcgg
60
cgggtgttcgg cgatgcgaag gcaaccgcgc cttccaagtt cgaccggttc cagccgcgcg
120
aggaattcga cgaggtcagc gccgccatgc agttccactg gggctccttc ttccacaacg
180
cgcatccggg cgagaagtgg ccgggtctacg gtttcgcgag cgacacggag cccggccgcg
240
cgaccgcgat cttcgcgggc aagtcctccg tggagtacga cccaaggcg gcgcagcgcc
300
gcgcgtggga gggctttgac atgcgcgaat ggggcatgca caggcaggac ctggtggaaa
360
cgctcaccga ttccatcgcc gacgagggca acgcttagcg acgccagcgc caccgagttt
420
agagaaatga aagaaatttt aatagagggg gga
453

```

<210> 1902

<211> 151

<212> PRT

<213> Homo sapiens

<400> 1902

```

Thr Arg Gly Pro Arg Cys Ala Gly Ser Gly Ser Ala Pro Cys Thr Pro
      1           5           10           15
Arg Thr Trp Arg Arg Cys Ser Ala Met Arg Arg Gln Pro Ala Leu Pro
      20           25           30
Ser Ser Thr Arg Ser Ser Arg Ala Arg Asn Ser Thr Arg Ser Ala Pro
      35           40           45
Pro Cys Ser Ser Thr Gly Ala Pro Ser Ser Thr Thr Arg Ile Arg Ala
      50           55           60
Arg Ser Gly Arg Ser Thr Val Ser Ala Ala Thr Arg Ser Pro Ala Ala
      65           70           75           80
Arg Pro Arg Ser Ser Arg Arg Ser Pro Pro Trp Ser Thr Thr Pro Arg
      85           90           95
Arg Arg Ser Ala Ala Arg Gly Arg Ala Leu Thr Cys Ala Asn Gly Ala
      100          105          110
Cys Thr Gly Arg Thr Trp Trp Lys Arg Ser Pro Ile Pro Ser Pro Thr

```

115 120 125
 Arg Ala Thr Leu Ser Asp Ala Ser Ala Thr Glu Phe Arg Glu Met Lys
 130 135 140
 Glu Ile Leu Ile Glu Gly Gly
 145 150

<210> 1903

<211> 531

<212> DNA

<213> Homo sapiens

<400> 1903

cggcgaggg agctgttccg ggacgcgcgc tccccgcgc cggactcctc gctcttctgc
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 gacttgctta cgccgctggc ccagttccgc gaggacatca cgtggaggcg gccccagaga
 120
 atttgtgcca acccccgctt gtttccaaat gaccaacggg aagggcaggt gaagcagggg
 180
 ctgctggggg attgctgggt cctgtgtgcc tgcgccgcgc tgcagaagag caggcacctc
 240
 ctggaccagg tcattcctgc gggacagccg agctggggccg accaggagta ccggggctcc
 300
 ttcacctgtc gcttttggca gtttggacgg tgggtggagg gtccatgggt cccttcgagc
 360
 ccctgtgggc ggggcaggtg gcggatgccc tgggtggacct gaccggcggc ctggcagaaa
 420
 gatggaacct gaagggcgta gcaggaagcg gaggccagca ggacaggcca ggccgctggg
 480
 agcacaggac ttgtcggcag ctgctccacc tgaaggacca gtgtctgata a
 531

<210> 1904

<211> 133

<212> PRT

<213> Homo sapiens

<400> 1904

Pro Ala Arg Glu Leu Phe Arg Asp Ala Ala Phe Pro Ala Ala Asp Ser
 1 5 10 15
 Ser Leu Phe Cys Asp Leu Ser Thr Pro Leu Ala Gln Phe Arg Glu Asp
 20 25 30
 Ile Thr Trp Arg Arg Pro Gln Arg Ile Cys Ala Asn Pro Arg Leu Phe
 35 40 45
 Pro Asn Asp Gln Arg Glu Gly Gln Val Lys Gln Gly Leu Leu Gly Asp
 50 55 60
 Cys Trp Phe Leu Cys Ala Cys Ala Ala Leu Gln Lys Ser Arg His Leu
 65 70 75 80
 Leu Asp Gln Val Ile Pro Ala Gly Gln Pro Ser Trp Ala Asp Gln Glu
 85 90 95
 Tyr Arg Gly Ser Phe Thr Cys Arg Phe Trp Gln Phe Gly Arg Trp Val
 100 105 110
 Glu Gly Pro Trp Val Pro Ser Ser Pro Cys Gly Arg Gly Arg Trp Arg
 115 120 125
 Met Pro Trp Trp Thr

130

<210> 1905
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 1905
 acgcgtgggc tgatcggcat gctctgggca ctgggggtgg tggcggaagt gctgatgttc
 60
 ctggccatga gccggatcct cgcgcgcttt tcggtccgtc ggggtgctgct ggccagtctc
 120
 ctccctggccg ccgtgcgctg gttgctgctg ggcgcggttg ccgatcacct ggcggtgctg
 180
 ttgttcgccc aggtgctgca cgcggcgacc ttgccagct ttcacgcctc tgccattcat
 240
 ttcgtgcaac gtagcttcgg cgcgcgcenca gcaaggccag ggcaggcggt atacgctgca
 300
 ctggccggta cgggcggggc tttgggcgcg ttgtacgccg gttatagctg gaacagcctg
 360
 gggccgacct ggactttcag catcggt
 387

<210> 1906
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 1906
 Thr Arg Gly Leu Ile Gly Met Leu Trp Ala Leu Gly Val Val Ala Glu
 1 5 10 15
 Val Leu Met Phe Leu Ala Met Ser Arg Ile Leu Ala Arg Phe Ser Val
 20 25 30
 Arg Arg Val Leu Leu Ala Ser Phe Leu Leu Ala Ala Val Arg Trp Leu
 35 40 45
 Leu Leu Gly Ala Leu Ala Asp His Leu Ala Val Leu Leu Phe Ala Gln
 50 55 60
 Val Leu His Ala Ala Thr Phe Ala Ser Phe His Ala Ser Ala Ile His
 65 70 75 80
 Phe Val Gln Arg Ser Phe Gly Ala Arg Xaa Ala Arg Pro Gly Gln Ala
 85 90 95
 Leu Tyr Ala Ala Leu Ala Gly Thr Gly Gly Ala Leu Gly Ala Leu Tyr
 100 105 110
 Ala Gly Tyr Ser Trp Asn Ser Leu Gly Pro Thr Trp Thr Phe Ser Ile
 115 120 125
 Val

<210> 1907
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 1907

acgcgttttcg accagcgcat ccgtgtcggc ggcattggcgg aaatcgtcgg ctccgacaag
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 aagctgcgcg ccgcgcgccg cgaaacgctc gagatgtgcg tcaacgacct gttcccgggc
 120
 ggccggcgaca cgtcgaaggc cactgtcttg acgggcctgc gcccgatgac gccggacggc
 180
 acgccgatcg tcggccgcac gccggtgtcg aacctgttcc tgaacaccgg ccacggcacg
 240
 ctccgctgga caatggtgtg cggctcgggc caactgtcgc ccgacctgat ctccgggcaag
 300
 atgcccgcg tccaggccga cgacctgtct nnc
 333

<210> 1908
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 1908
 Thr Arg Phe Asp Gln Arg Ile Arg Val Gly Gly Met Ala Glu Ile Val
 1 5 10 15
 Gly Phe Asp Lys Lys Leu Arg Ala Ala Arg Arg Glu Thr Leu Glu Met
 20 25 30
 Cys Val Asn Asp Leu Phe Pro Gly Gly Gly Asp Thr Ser Lys Ala Thr
 35 40 45
 Phe Trp Thr Gly Leu Arg Pro Met Thr Pro Asp Gly Thr Pro Ile Val
 50 55 60
 Gly Arg Thr Pro Val Ser Asn Leu Phe Leu Asn Thr Gly His Gly Thr
 65 70 75 80
 Leu Gly Trp Thr Met Val Cys Gly Ser Gly Gln Leu Leu Ala Asp Leu
 85 90 95
 Ile Ser Gly Lys Met Pro Ala Ile Gln Ala Asp Asp Leu Ser Xaa
 100 105 110

<210> 1909
 <211> 2767
 <212> DNA
 <213> Homo sapiens

<400> 1909
 ngactgccgg tcgttcggac gtcttgccctg tcgcgtggag gagagggtccg ggctctccag
 60
 gaagggtggct gcggcgacaa aatgaagata ttcgtgggca acgtcgacgg gccggatacg
 120
 actccggagg agctggcagc cctctttgcg ccctacggca cggcatgag ctgcgccgtc
 180
 atgaaacagt tcgccttcgt gcacatgcgc gagaacgcgg gcgcgctgcg cgccatcgaa
 240
 gccctgcacg gccacgagct gcggccgggg cgcgcgctcg tggtggaat gtcgcgcccc
 300
 aggcctctta atacttgga gattttcgtg ggcaatgtgt cggctgcatg cacgagccag
 360
 gaactgcgca gcctcttcga gcgccgcgga cgcgtcatcg agtgtgacgt ggtgaaagac
 420

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 2760
 tggaaaa
 2767

<210> 1910
 <211> 669
 <212> PRT
 <213> Homo sapiens

<400> 1910
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 1 5 10 15
 Glu Leu Ala Ala Leu Phe Ala Pro Tyr Gly Thr Val Met Ser Cys Ala
 20 25 30
 Val Met Lys Gln Phe Ala Phe Val His Met Arg Glu Asn Ala Gly Ala
 35 40 45
 Leu Arg Ala Ile Glu Ala Leu His Gly His Glu Leu Arg Pro Gly Arg
 50 55 60
 Ala Leu Val Val Glu Met Ser Arg Pro Arg Pro Leu Asn Thr Trp Lys
 65 70 75 80
 Ile Phe Val Gly Asn Val Ser Ala Ala Cys Thr Ser Gln Glu Leu Arg
 85 90 95
 Ser Leu Phe Glu Arg Arg Gly Arg Val Ile Glu Cys Asp Val Val Lys
 100 105 110
 Asp Tyr Ala Phe Val His Met Glu Lys Glu Ala Asp Ala Lys Ala Ala
 115 120 125
 Ile Ala Gln Leu Asn Gly Lys Glu Val Lys Gly Lys Arg Ile Asn Val
 130 135 140
 Glu Leu Ser Thr Lys Gly Gln Lys Lys Gly Pro Gly Leu Ala Val Gln
 145 150 155 160
 Ser Gly Asp Lys Thr Lys Lys Pro Gly Ala Gly Asp Thr Ala Phe Pro

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      165      170      175
Gly Thr Gly Gly Phe Ser Ala Thr Phe Asp Tyr Gln Gln Ala Phe Gly
      180      185      190
Asn Ser Thr Gly Gly Phe Asp Gly Gln Ala Arg Gln Pro Thr Pro Pro
      195      200      205
Phe Phe Gly Arg Asp Arg Ser Pro Leu Arg Arg Ser Pro Pro Arg Ala
      210      215      220
Ser Tyr Val Ala Pro Leu Thr Ala Gln Pro Ala Thr Tyr Arg Ala Gln
225      230      235      240
Pro Ser Val Ser Leu Gly Ala Ala Tyr Arg Ala Gln Pro Ser Ala Ser
      245      250      255
Leu Gly Val Gly Tyr Arg Thr Gln Pro Met Thr Ala Gln Ala Ala Ser
      260      265      270
Tyr Arg Ala Gln Pro Ser Val Ser Leu Gly Ala Pro Tyr Arg Gly Gln
      275      280      285
Leu Ala Ser Pro Ser Ser Gln Ser Ala Ala Ala Ser Ser Leu Gly Pro
      290      295      300
Tyr Gly Gly Ala Gln Pro Ser Ala Ser Ala Leu Ser Ser Tyr Gly Gly
305      310      315      320
Gln Ala Ala Ala Ala Ser Ser Leu Asn Ser Tyr Gly Ala Gln Gly Ser
      325      330      335
Ser Leu Ala Ser Tyr Gly Asn Gln Pro Ser Ser Tyr Gly Ala Gln Ala
      340      345      350
Ala Ser Ser Tyr Gly Val Arg Ala Ala Ser Ser Tyr Asn Thr Gln
      355      360      365
Gly Ala Ala Ser Ser Leu Gly Ser Tyr Gly Ala Gln Ala Ala Ser Tyr
      370      375      380
Gly Ala Gln Ser Ala Ala Ser Ser Leu Ala Tyr Gly Ala Gln Ala Ala
385      390      395      400
Ser Tyr Asn Ala Gln Pro Ser Ala Ser Tyr Asn Ala Gln Ser Ala Pro
      405      410      415
Tyr Ala Ala Gln Gln Ala Ala Ser Tyr Ser Ser Gln Pro Ala Ala Tyr
      420      425      430
Val Ala Gln Pro Ala Thr Ala Ala Tyr Ala Ser Gln Pro Ala Ala
      435      440      445
Tyr Ala Ala Gln Ala Thr Thr Pro Met Ala Gly Ser Tyr Gly Ala Gln
      450      455      460
Pro Val Val Gln Thr Gln Leu Asn Ser Tyr Gly Ala Gln Ala Ser Met
465      470      475      480
Gly Leu Ser Gly Ser Tyr Gly Ala Gln Ser Ala Ala Ala Ala Thr Gly
      485      490      495
Ser Tyr Gly Ala Ala Ala Tyr Gly Ala Gln Pro Ser Ala Thr Leu
      500      505      510
Ala Ala Pro Tyr Arg Thr Gln Ser Ser Ala Ser Leu Ala Ala Ser Tyr
      515      520      525
Ala Ala Gln Gln His Pro Gln Ala Ala Ala Ser Tyr Arg Gly Gln Pro
      530      535      540
Gly Asn Ala Tyr Asp Gly Ala Gly Gln Pro Ser Ala Ala Tyr Leu Ser
545      550      555      560
Met Ser Gln Gly Ala Val Ala Asn Ala Asn Ser Thr Pro Pro Pro Tyr
      565      570      575
Glu Arg Thr Arg Leu Ser Pro Pro Arg Ala Ser Tyr Asp Asp Pro Tyr
      580      585      590
Lys Lys Ala Val Ala Met Ser Lys Arg Tyr Gly Ser Asp Arg Arg Leu

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595	600	605
Ala Glu Leu Ser Asp Tyr Arg Arg Leu Ser Glu Ser Gln Leu Ser Phe		
610	615	620
Arg Arg Ser Pro Thr Lys Ser Ser Leu Asp Tyr Arg Arg Leu Pro Asp		
625	630	635
Ala His Ser Asp Tyr Ala Arg Tyr Ser Gly Ser Tyr Asn Asp Tyr Leu		
645	650	655
Arg Ala Ala Gln Met His Ser Gly Tyr Gln Arg Arg Met		
660	665	

<210> 1911
 <211> 339
 <212> DNA
 <213> Homo sapiens

<400> 1911
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 cgcattcgacg atgaaagctt cctccgccca gttgagccga cccaagccgc accgtggggcg
 180
 gcagcgcata gccagcaggc gtggtggaat cacctgaagt acctgcgcac cgccgcgcgt
 240
 gaagcactgg tgggtccgct cgctcattgag gtggagggga aattcgcagg gcaggtaacc
 300
 ctgggaaaca ttcagcatgg cagcattcgc gattgctgg
 339

<210> 1912
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1912
Xaa Gly Trp Pro Glu Ser Thr Pro Ser Val Gln Leu Pro Ser Ser Ser
1 5 10 15
Val Phe Pro Ser Gly Ala Arg Met Arg Leu Arg Pro Leu Leu Arg Ser
20 25 30
Asp Gly His Glu Trp Arg Arg Gln Arg Ile Asp Asp Glu Ser Phe Leu
35 40 45
Arg Pro Val Glu Pro Thr Gln Ala Ala Pro Trp Ala Ala Ala His Ser
50 55 60
Gln Gln Ala Trp Trp Asn His Leu Lys Tyr Leu Arg Thr Ala Ala Arg
65 70 75 80
Glu Ala Leu Val Val Pro Leu Val Ile Glu Val Glu Gly Lys Phe Ala
85 90 95
Gly Gln Val Thr Leu Gly Asn Ile Gln His Gly Ser Ile Arg Asp Cys
100 105 110
Trp

<210> 1913
 <211> 767

<212> DNA
<213> Homo sapiens

<400> 1913
gtgcacaccg gttcacagcg atatttcagg caaattgaaa gcgtcagttc gataggctga
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atgcgaaatg ggggatttgt caccctcagg gaccggaagg aaggagcag tccgatggca
120
gcgccagtac tcgatctcgt cctcccagcc ttgtccgaaa cctccgcaa tctcatcggc
180
cagagggttg gccagggatg tcacacctcc atccccacat cgaatctacg gtgagcttcg
240
tcccagctgt cgggcagtac aaggcacctc ggatcaagct ttcttggcgt gaactgggtcc
300
tggtacccat caatgccacc cactgcact ccaatcccc acaagttgtc caacacgcgg
360
cagaattgcg tcgcagccac ccggaccttg ccatcaaggt ggcccgcgcc accggaccag
420
caccggctct cctcaacctc gtcgatacgc gattgcgtct ggcagctcat cgcgtccatg
480
cccaggagct ggactcactc gtattgtctt cccctgatgg cggcgattta cgtggctcgg
540
caatgctgtc caggctgacc cggctgtggt cccagcacca ccaccttcg gtccgcatcg
600
ccaccaatcg tgggtgggct actgcggtcg aggaggtcgt cgcccgcctg cgacaggagg
660
ggcgccgtca tatcgcagtg ggaagcctgt ggatttgca cgacgagaat ttccgcattc
720
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767

<210> 1914
<211> 190
<212> PRT
<213> Homo sapiens

<400> 1914
Met Ser His Leu His Pro His Ile Glu Ser Thr Val Ser Phe Val Pro
1 5 10 15
Ala Val Gly Gln Tyr Lys Ala Pro Arg Ile Lys Leu Ser Trp Arg Glu
20 25 30
Leu Val Leu Val Pro Ile Asn Ala Thr His Leu His Ser Asn Pro Pro
35 40 45
Gln Val Val Gln His Ala Ala Glu Leu Arg Arg Ser His Pro Asp Leu
50 55 60
Ala Ile Lys Val Ala Arg Pro Thr Gly Pro Ala Pro Val Leu Leu Asn
65 70 75 80
Leu Val Asp Thr Arg Leu Arg Leu Ala Ala His Arg Val His Ala Gln
85 90 95
Glu Leu Asp Ser Leu Val Leu Ser Ser Pro Asp Gly Gly Asp Leu Arg
100 105 110
Gly Ser Ala Met Leu Ser Arg Leu Thr Arg Leu Trp Ser Gln His His
115 120 125
His Leu Pro Val Arg Ile Ala Thr Asn Arg Gly Gly Ala Thr Ala Val

130	135	140
Glu Glu Val Val Ala Arg	Leu Arg Gln Glu Gly Arg Arg His Ile Ala	
145	150	155
Val Gly Ser Leu Trp Ile Cys Asp Asp	Glu Asn Phe Arg Ile His Thr	160
	165	170
Arg Gln Ala Leu His Ala Gly Ala	Glu Val Val Ala Ala Pro	175
	180	185
		190

<210> 1915
 <211> 571
 <212> DNA
 <213> Homo sapiens

<400> 1915
 acgcgtccca ggccccacag gcccctctg gctctcaggg cccccgccca gtggccagga
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 aggtgtgagc gcacgatggg cagtcacgcc gcacacacgc tctgctcatg tccctcccca
 120
 ggaccctctg accgggcaca agggcagctg tgaggacaag gccacagcca caaaccaacc
 180
 tggcacacac ggctcagggc gaggcactgc cccatggggc tgcattgatcc acgctcacag
 240
 gtgtcattgt ctatgctcag gggggcttgg caccatggga aaccacacca gaacacatgg
 300
 agaagccaca gcacaacctc agcggccgcc atgcaggacc ctgggtctca cccattgcac
 360
 ccaccgtgcg ggaccctctg gcctcaccgc gaacatccac agtgtgggac tgctgcgtct
 420
 caccactgc acctgccgtg caggatccct gagtctcacc cgccgcaccc gccgtgctgg
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 atccctgagt ctacccgcc gcaccgcgc tacctgccgc atccgccatg cgggaccct
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 gcgtctcacc caccgcaccc gccgtgctgg a
 571

<210> 1916
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1916
 Met Gly Leu His Asp Pro Arg Ser Gln Val Ser Leu Ser Met Leu Arg
 1 5 10 15
 Gly Ala Trp His His Gly Lys Pro Thr Gln Asn Thr Trp Arg Ser His
 20 25 30
 Ser Thr Thr Ser Ala Pro Ala Met Gln Asp Pro Gly Ser His Pro Leu
 35 40 45
 His Pro Pro Cys Gly Thr Pro Ala Pro His Pro Glu His Pro Gln Cys
 50 55 60
 Gly Thr Ala Ala Ser His Pro Leu His Leu Pro Cys Arg Ile Pro Glu
 65 70 75 80
 Ser His Pro Pro His Pro Pro Cys Gly Ile Pro Glu Ser His Pro Pro
 85 90 95
 His Pro Pro Tyr Leu Pro His Pro Pro Cys Gly Thr Pro Ala Ser His

100 105 110
 Pro Pro His Pro Pro Cys Gly
 115

<210> 1917
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 1917
 nnacgcgtga ccggcgaaga tctccgcacc ctatctgccg ggtacacgcc ggggtgattcc
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 gatattgtctt gggctgccat cacccttggtg cgcggtgtcg ttgcctccgc cttggaccgt
 120
 catccctatg gcccggtgaa gtcggtaaag gtagcaggtc cggccggcca cccagccccg
 180
 gatttcgccg ccggatggtt gtcgaccgc ttggcagttc ccgtacatcg cacagtggcc
 240
 gactccccaa ggagacactt cccggtgact catttgcaat tcaatcggga gacaaccac
 300
 gtagacgtcg atgtcattga cgagcgcacg gttcgtgtat gtgttcggg ttcgcccga
 360

<210> 1918
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 1918
 Xaa Arg Val Thr Gly Glu Asp Leu Arg Thr Leu Ser Ala Gly Tyr Thr
 1 5 10 15
 Pro Gly Asp Ser Asp Met Ser Trp Ala Ala Ile Thr Leu Trp Arg Gly
 20 25 30
 Val Val Ala Ser Ala Leu Asp Arg His Pro Tyr Gly Pro Val Lys Ser
 35 40 45
 Val Lys Val Ala Gly Pro Ala Gly His Pro Ala Pro Asp Phe Ala Ala
 50 55 60
 Gly Trp Leu Leu Asp Arg Leu Ala Val Pro Val His Arg Thr Val Ala
 65 70 75 80
 Asp Ser Pro Arg Arg His Phe Pro Val Thr His Leu Gln Phe Asn Arg
 85 90 95
 Glu Thr Thr His Val Asp Val Asp Val Ile Asp Glu Arg Thr Val Arg
 100 105 110
 Val Cys Val Pro Gly Ser Pro Glu
 115 120

<210> 1919
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 1919
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ccaggctgca gccatccctc ctgcactgct gaggcctggc cagcgcctc ncggccacgc
 120
 ccacctccat cctctttgcc ccttactaaa cactgggagc ccgcccggcc gcgacaggcc
 180
 aggccagcgg gaaggtgtag acgaacagcc caaaggattc agcagtgtaa gtaccccacc
 240
 tacgcactta caaagtgcag gccaccgccc agccccacct ccagacacag gcggaggcca
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 agctcgcggg caccgtatca tcccgtgccg tctccacct acccctgcc attg
 354

<210> 1920

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1920

Xaa	Gly	Arg	Ser	Cys	Val	His	Cys	Ala	Val	Pro	Ala	Thr	Ser	Ala	Ile
1				5					10					15	
Cys	Leu	Ser	Leu	Pro	Gly	Cys	Ser	His	Pro	Ser	Cys	Thr	Ala	Glu	Ala
			20					25					30		
Trp	Pro	Arg	Ala	Ser	Arg	Pro	Arg	Pro	Pro	Pro	Ser	Ser	Leu	Pro	Leu
			35				40					45			
Thr	Lys	His	Trp	Glu	Pro	Ala	Arg	Pro	Arg	Gln	Ala	Arg	Pro	Ala	Gly
	50					55				60					
Arg	Cys	Arg	Arg	Thr	Ala	Gln	Arg	Ile	Gln	Gln	Cys	Lys	Tyr	Pro	Thr
65				70					75					80	
Tyr	Ala	Leu	Thr	Lys	Cys	Arg	Pro	Pro	Pro	Ser	Pro	Thr	Ser	Arg	His
			85					90					95		
Arg	Arg	Arg	Pro	Ser	Ser	Arg	Ala	Pro	Tyr	His	Pro	Val	Pro	Ser	Pro
			100					105					110		
Pro	Tyr	Pro	Cys	Gln	Leu										
															115

<210> 1921

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1921

gaattcatct ggaggcagag agatggggaa gcgggtggga gaagagcaag aacggaaact
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 atttttaata caaatccagt catggtattg tatacacagc agcctctgtc ttccagaaac
 120
 ctacacggcc gccacaccaa agttaatgcc accaggcgct atcacacaga tgtgaggtgc
 180
 aggtgccact ccacagccgt gggcagacct gggagcccag ctctctctgg ttccaccctc
 240
 cacactgccc accccatcct tctctcccag tctccactcc atcgaagcct ccagatgac
 300
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 357

<210> 1922

<400> 1924

Met	Val	Arg	Lys	Gly	Leu	Cys	Val	Ala	Leu	Leu	Val	Leu	Val	Thr	Leu
1				5					10					15	
Ser	Gly	Ser	Ala	Gln	Lys	Lys	Glu	Trp	Phe	Ser	Asn	Ile	Lys	Leu	Ser
			20					25					30		
Gly	Tyr	Gly	Met	Thr	Gln	Tyr	Gln	Tyr	Thr	Asp	Gln	Glu	Gly	Ser	Lys
		35					40					45			
Gly	His	Ser	Phe	Asn	Leu	Arg	Leu	Phe	Pro	Leu	Pro	Leu	Asn	Gly	Arg
	50					55					60				
Ile	Leu	Asn	Asp	Phe	Tyr	Trp	Lys	Ala	Gln	Ala	Gln	Phe	Asn	Gly	Asn

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65              70              75              80
Thr Ser Thr Leu Gly Ser Ser Pro Arg Leu Val Asp Leu Phe Val Glu
      85              90              95
Trp Gln Lys Tyr Asp Tyr Phe Lys Val Lys Leu Gly Gln Phe Lys Arg
      100              105              110
Pro Phe Thr Phe Glu Asn Pro
      115

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<210> 1925

<211> 427

<212> DNA

<213> Homo sapiens

<400> 1925

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120
gggtcccccc caggctgtga gcagataaag ccctgcgtgg cttcacaaca gtgactgggt
180
ctgagaaaca ggtccttgta caagcgacag ggagtgtctca caccagatgt ggcagccccct
240
ccagccagg ctgtgtgggtg cagccgcctg gtatatgtgt ccatcgctga tgaaaacagc
300
gttgtgtggt gcatgactgt tgtctgtttt cttcatggaa acaaggaaac ctaagcatta
360
aaacaacacc atccacgtct gggtccttag agcaaatgga agcaccaggc tctggtgcac
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ggcgcgc
427

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<210> 1926

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1926

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Met His His Thr Thr Leu Phe Ser Ser Ala Met Asp Thr Tyr Thr Arg
  1              5              10              15
Arg Leu His His Thr Ala Trp Arg Gly Gly Ala Ala Thr Ser Gly Val
      20              25              30
Ser Thr Pro Cys Arg Leu Tyr Lys Asp Leu Phe Leu Arg Thr Ser His
      35              40              45
Cys Cys Glu Ala Thr Gln Gly Phe Ile Cys Ser Gln Pro Gly Gly Ser
      50              55              60
Pro Gly His Arg Thr Cys Ala Arg Thr Gly Trp Gly Gly Ile Ser Leu
65              70              75              80
Lys Ser Gln Gly Gly Leu Pro His Trp Val Ser Met Gln Glu Gln Leu
      85              90              95
Asn Arg Cys Leu Leu Glu Thr Leu
      100

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<210> 1927

<211> 516

<212> DNA

<213> Homo sapiens

<400> 1927

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 120
 ctttgtaact tccactcccc aaacttcctg aggatctcag aggtggaaat gagaggttcc
 180
 gaggatgcgg cagctggaac agtattgcag cggctgatcc aggaacaact gcggtatggc
 240
 accccaaccg agaacatgaa cttgctggcc attcagcacc aggccacagg gactgcagga
 300
 ccagcccatc ctacaaacaa cttttcttcc acggaaaacc tcaactcaaga agaccacaa
 360
 atgggtctacc agtcagcacg ccaagaaccg caggggtcaag aacaccagng tgganncaat
 420
 acgggtgatgg agaaacaggt ccggtccacg cagcctcagc agaacaacga ggaactgccc
 480
 acttacgagg aggccaaagc acagcccttc acgcgt
 516

<210> 1928

<211> 172

<212> PRT

<213> Homo sapiens

<400> 1928

Xaa	Leu	Glu	Asp	Ser	Thr	Tyr	Phe	Ser	Pro	Asp	Phe	Gln	Leu	Tyr	Ser
1				5				10					15		
Gly	Arg	His	Glu	Thr	Ser	Ala	Leu	Thr	Val	Glu	Ala	Thr	Ser	Ser	Ile
			20					25					30		
Arg	Glu	Lys	Val	Val	Glu	Asp	Pro	Leu	Cys	Asn	Phe	His	Ser	Pro	Asn
		35					40					45			
Phe	Leu	Arg	Ile	Ser	Glu	Val	Glu	Met	Arg	Gly	Ser	Glu	Asp	Ala	Ala
	50					55				60					
Ala	Gly	Thr	Val	Leu	Gln	Arg	Leu	Ile	Gln	Glu	Gln	Leu	Arg	Tyr	Gly
65				70					75					80	
Thr	Pro	Thr	Glu	Asn	Met	Asn	Leu	Leu	Ala	Ile	Gln	His	Gln	Ala	Thr
			85					90					95		
Gly	Ser	Ala	Gly	Pro	Ala	His	Pro	Thr	Asn	Asn	Phe	Ser	Ser	Thr	Glu
		100					105						110		
Asn	Leu	Thr	Gln	Glu	Asp	Pro	Gln	Met	Val	Tyr	Gln	Ser	Ala	Arg	Gln
		115					120					125			
Glu	Pro	Gln	Gly	Gln	Glu	His	Gln	Xaa	Gly	Xaa	Asn	Thr	Val	Met	Glu
	130					135					140				
Lys	Gln	Val	Arg	Ser	Thr	Gln	Pro	Gln	Gln	Asn	Asn	Glu	Glu	Leu	Pro
145					150					155				160	
Thr	Tyr	Glu	Glu	Ala	Lys	Ala	Gln	Pro	Phe	Thr	Arg				
				165						170					

<210> 1929

<211> 843

<212> DNA

<213> Homo sapiens

<400> 1929

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tctccaggta catgtccttc aaggagaaat acacttcctg gcctgggcct gggccagggg
120
ccttctgggc cttgtctgga gtgcccacag cagaggctgg cttcctggta ctatctgtgc
180
cagaggaccc agggccccgt gcagccctgc ctctgggctg ggtctgaacc tgctccacgc
240
ccacggggccc ctgagtccca caggagtcag gctcgtctga gctggggatg cagttttctg
300
aagaacggcg gctttgggct gccttctcta actctggctt ccgcacctg cttggattcc
360
tcacttttct ttttcttctt ggccccactc tcctctttga gggctctctg agggcccagc
420
tccatggcgt cacagatgta tgtcagcaag ccattgctctc cgtcctctcc attctcgggg
480
gcagcctccc cgttgggtgt cacttctcca gaagcaaact gttgatcagg cccaaacctg
540
agtgtgagc agtctcagtc tctccctcct gccaaagccgc caggggccca ccctcaggct
600
ccctggtagg gaccgagggg cccggcgctt gagccccgct caatcgccgc tttcgtctga
660
agcggtcggg gctgagcttg cgcagagtgt cgacctcccc aggcaccgcc ttctcgtgct
720
tccagctctg ctcgatctcg cgcagctttg ccgcagcctt gcgcttcaac ttggcgaacc
780
agcgtggtg gatcttgtag tcagtcattg tggccacctc ccaggacct gagcaggaca
840
caa
843

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<210> 1930

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1930

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Leu Pro Gly Cys Ser Pro Gly Thr Cys Pro Ser Arg Arg Asn Thr Leu
 1             5             10             15
Pro Gly Leu Gly Leu Gly Gln Gly Pro Ser Gly Pro Cys Leu Glu Cys
      20             25             30
Pro Gln Gln Arg Leu Ala Ser Trp Tyr Tyr Leu Cys Gln Arg Thr Gln
      35             40             45
Ala Pro Val Gln Pro Cys Leu Trp Ala Gly Ser Glu Pro Ala Pro Arg
      50             55             60
Pro Arg Ala Pro Glu Ser His Arg Ser Gln Ala Arg Leu Ser Trp Gly
      65             70             75             80
Cys Ser Phe Leu Lys Asn Gly Gly Phe Gly Leu Pro Ser Leu Thr Leu
      85             90             95
Ala Ser Ala Pro Cys Leu Asp Ser Ser Ser Phe Phe Phe Phe Leu Ala

```

100 105 110
 Pro Leu Ser Ser Leu Arg Ala Leu
 115 120
 <210> 1931
 <211> 719
 <212> DNA
 <213> Homo sapiens
 <400> 1931
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 60
 gtgcaagaaa caggaggaaa cccccagag cgcagcctcc tggaagcggga agggagcact
 120
 gaagaggagg tggtagtggt tgtcagaagc tgctgagaag ccagttagat aaagcggaga
 180
 agcttcctac taggacagct tcctccagc ccagtgtggc cacgctggtg tcctcgggtga
 240
 ccagacacgt ggccatgaat ttctcagtgt gctttattgt tgattaaatg cagtcggctc
 300
 acgaggtcga ctttggaac aggaggtccg tgggtcgtgg aataagaaag ggcatcatgg
 360
 ttgcagagga agggaaggaa gccacaggc gccttgggga gctttctgaa aggcaggctc
 420
 gatcatgcct ctctgggcta cggctcctc acggtggctc ctggttgga ctgaagtggc
 480
 ccccttggtc cctctctccc atctcagcat tagccaggac ttttggttg gggcccccag
 540
 cagggtgcc cccttgcaac acttcttttc ccacatgatc gtgccttcca aacctacttc
 600
 cagcgtgcc ctcttcaggg agcctttcat aaccacctct ccctccact ggctaaagat
 660
 gaggttgagc aactgcagga cttgggacct tgttctgcc cctgtggctg cctggatcc
 719

<210> 1932
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1932
 Met Pro Leu Trp Ala Thr Val Ser Ser Arg Trp Leu Leu Val Gly Thr
 1 5 10 15
 Glu Val Val Pro Leu Val Pro Leu Ser His Leu Ser Ile Ser Gln Asp
 20 25 30
 Phe Trp Leu Gly Gly Pro Ser Arg Ala Ala Pro Leu Gln His Phe Phe
 35 40 45
 Ser His Met Ile Val Pro Ser Lys Pro Thr Ser Ser Val Ala Leu Phe
 50 55 60
 Arg Glu Pro Phe Ile Thr Thr Ser Pro Phe His Trp Leu Lys Met Arg
 65 70 75 80
 Leu Ser Asn Cys Arg Thr Trp Asp Leu Val Pro Ala Pro Val Ala Ala
 85 90 95
 Trp Ile

<210> 1933

<211> 295

<212> DNA

<213> Homo sapiens

<400> 1933

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ggcgccgagc tgtgggcggc catggagcgc atgcctgccg acctgattat cctcgacctg
60
atgctgccgg gggataacgg cctcttgctg tgccagcgcc tgcgccagca atacgcaaca
120
ccagtgatca tgctgaccgc catgggcgaa ctgagtgate gcgtgggggg cctggaaatg
180
ggcgccgatg actacctgaa caaacctttc gatgccctg aattacttgc ccgggtgcgc
240
gctgtactgc gtccggcgctg tgaaaaccga ccgacgttgg gcgacgtgtc gcgcc
295

```

<210> 1934

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1934

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Gly Ala Glu Leu Trp Ala Ala Met Glu Arg Met Pro Ala Asp Leu Ile
1      5      10      15
Ile Leu Asp Leu Met Leu Pro Gly Asp Asn Gly Leu Leu Leu Cys Gln
20     25     30
Arg Leu Arg Gln Gln Tyr Ala Thr Pro Val Ile Met Leu Thr Ala Met
35     40     45
Gly Glu Leu Ser Asp Arg Val Gly Gly Leu Glu Met Gly Ala Asp Asp
50     55     60
Tyr Leu Asn Lys Pro Phe Asp Ala Arg Glu Leu Leu Ala Arg Val Arg
65     70     75     80
Ala Val Leu Arg Pro Ala Cys Glu Asn Arg Pro Thr Leu Gly Asp Val
85     90     95
Ser Arg

```

<210> 1935

<211> 298

<212> DNA

<213> Homo sapiens

<400> 1935

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accggtgtgg cgggcgcggc cttcaccacc atcggtccca ccgggccgac ggccgggttcg
60
caatacatcg tcgatacctt cctggtagtg gtgttcgggg gggcccaaag cctgttcggc
120
cccatcgctt cggcgttcgt gattgccag acccaatcgc tgcggagtt ttctctcagt
180
ggctcgatgg ccaaggtgct gacctgtcgc tcggtgatcc tgatcctgat gctgcgcccc
240

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caagggttgt tctccatcaa agtgcgcaag taaaggcgag cagataaggg tttaagca
298

<210> 1936
<211> 90
<212> PRT
<213> Homo sapiens

<400> 1936
Thr Gly Val Ala Gly Ala Ala Phe Thr Thr Ile Gly Ser Thr Gly Pro
1 5 10 15
Thr Ala Gly Ser Gln Tyr Ile Val Asp Thr Phe Leu Val Val Val Phe
20 25 30
Gly Gly Ala Gln Ser Leu Phe Gly Pro Ile Ala Ser Ala Phe Val Ile
35 40 45
Ala Gln Thr Gln Ser Leu Ser Glu Phe Phe Leu Ser Gly Ser Met Ala
50 55 60
Lys Val Leu Thr Leu Ser Val Ile Leu Ile Leu Met Leu Arg Pro
65 70 75 80
Gln Gly Leu Phe Ser Ile Lys Val Arg Lys
85 90

<210> 1937
<211> 513
<212> DNA
<213> Homo sapiens

<400> 1937
gcacggcgca cagtaacacc aactcgaaag agaccttatg aatgcaaggt gtgcgggaaa
60
gcctttaatt ctcccaattt atttcaaadc catcaaagaa ctcacactgg aaagaggtcc
120
tataaatgta gggaaatagt gagagccttc acagtttcca gtttctttcg aaaacatgga
180
aaaatgcata ctggagaaaa acgctatgaa tgtaaatact gtggaaaacc tatcgattat
240
cccagtttat ttcaaattca tgtagaact cactctggag aaaaacccta caaatgtaaa
300
caatgtggta aagccttcat ttccgcaggt tacgttcgga cacatgaaat cagatctcac
360
gcgctggaga aatcccacca atgtcaggaa tgtgggaaga aactcagttg ttccagttcc
420
cttcacagac atgaaagaac tcatagtgga ggaaaactct acgaatgtca aaaatgtgac
480
caagtcttta gatgtccac gtccttcac gcg
513

<210> 1938
<211> 171
<212> PRT
<213> Homo sapiens

<400> 1938
Ala Arg Arg Thr Val Thr Pro Thr Arg Lys Arg Pro Tyr Glu Cys Lys

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      1           5           10           15
Val Cys Gly Lys Ala Phe Asn Ser Pro Asn Leu Phe Gln Ile His Gln
      20           25           30
Arg Thr His Thr Gly Lys Arg Ser Tyr Lys Cys Arg Glu Ile Val Arg
      35           40           45
Ala Phe Thr Val Ser Ser Phe Phe Arg Lys His Gly Lys Met His Thr
      50           55           60
Gly Glu Lys Arg Tyr Glu Cys Lys Tyr Cys Gly Lys Pro Ile Asp Tyr
      65           70           75           80
Pro Ser Leu Phe Gln Ile His Val Arg Thr His Ser Gly Glu Lys Pro
      85           90           95
Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Ile Ser Ala Gly Tyr Val
      100          105          110
Arg Thr His Glu Ile Arg Ser His Ala Leu Glu Lys Ser His Gln Cys
      115          120          125
Gln Glu Cys Gly Lys Lys Leu Ser Cys Ser Ser Ser Leu His Arg His
      130          135          140
Glu Arg Thr His Ser Gly Lys Leu Tyr Glu Cys Gln Lys Cys Asp
      145          150          155          160
Gln Val Phe Arg Cys Pro Thr Ser Leu His Ala
      165          170

```

<210> 1939

<211> 1233

<212> DNA

<213> Homo sapiens

<400> 1939

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gccggcagcg ccgctcccca gggagggagt ccgcagcctg aggtcttctc caagaaaaaa
60
aaagaaaaaa aaacaacatg gctgcaaagg agaaactgga ggcagtgtta aatgtggccc
120
tgagggtgcc aagcatcatg ctgttgatg tctgtacag atgggatgtc agctcctttt
180
tccagcagat ccaaagaagt agccttagta ataaccctct tttccagtat aagtatttgg
240
ctcttaatat gcattatgta ggttatatct taagtgtggt gctgctaaca ttgccaggc
300
agcatctggt tcagctttat ctatatcttt tgactgctct gctcctctat gctggacatc
360
aaatttccag ggactatgtt cggagtgaac tggggtttgc ctatgagga ccaatgtatt
420
tagaacctct ctctatgaat cggtttacca cagccttaat aggtcagttg gtggtgtgta
480
ctttatgctc ctgtgtcatg aaaacaaagc agatttggct gttttcagct cacatgcttc
540
ctctgctagc acgactctgc cttgttcctt tggagacaat tgctatcatc aataaatttg
600
ctatgatttt tactggattg gaagtctctc attttcttgg gtctaattct ttggtacctt
660
ataaccttgc taaatctgca tacagagaat tggttcaggt agtggaggta tatggccttc
720
tcgccttggg aatgtccctg tggaatcaac tggtagtccc tgttcttttc atgggtttct
780

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ggctcgtctt atttgcctct cagatttact cctatttcag tactcgagat cagcctgcat
 840
 cacgtgagag gcttcttttc cttttcttga caaggtaatt aataagagcc tatgatacta
 900
 tatataacct tagaaagaga aaactttgat ctaggaatag taagttttgc agattacttt
 960
 taticgttcat gttacacaac ttcgtatttt gttaagatag gattttcatt cactggatac
 1020
 ctaggttttg caatgcagag aggtgctaac ataataatgt ggtttatttg gctgcactat
 1080
 ggaccagagt gtagcaaagt atttgtggaa aggtacatag cacatcgtaa aagtattttt
 1140
 tcaatttcaa gttaaaatta ttgggtcaat cagaaaaaag tatattataa aaataacatt
 1200
 tattgagtat tttaaataga ccataccatt naa
 1233

<210> 1940

<211> 266

<212> PRT

<213> Homo sapiens

<400> 1940

Met	Ala	Ala	Lys	Glu	Lys	Leu	Glu	Ala	Val	Leu	Asn	Val	Ala	Leu	Arg
1				5					10					15	
Val	Pro	Ser	Ile	Met	Leu	Leu	Asp	Val	Leu	Tyr	Arg	Trp	Asp	Val	Ser
			20					25					30		
Ser	Phe	Phe	Gln	Gln	Ile	Gln	Arg	Ser	Ser	Leu	Ser	Asn	Asn	Pro	Leu
		35					40					45			
Phe	Gln	Tyr	Lys	Tyr	Leu	Ala	Leu	Asn	Met	His	Tyr	Val	Gly	Tyr	Ile
	50					55				60					
Leu	Ser	Val	Val	Leu	Leu	Thr	Leu	Pro	Arg	Gln	His	Leu	Val	Gln	Leu
65					70					75				80	
Tyr	Leu	Tyr	Phe	Leu	Thr	Ala	Leu	Leu	Leu	Tyr	Ala	Gly	His	Gln	Ile
			85						90					95	
Ser	Arg	Asp	Tyr	Val	Arg	Ser	Glu	Leu	Gly	Phe	Ala	Tyr	Glu	Gly	Pro
		100						105					110		
Met	Tyr	Leu	Glu	Pro	Leu	Ser	Met	Asn	Arg	Phe	Thr	Thr	Ala	Leu	Ile
	115							120				125			
Gly	Gln	Leu	Val	Val	Cys	Thr	Leu	Cys	Ser	Cys	Val	Met	Lys	Thr	Lys
	130					135					140				
Gln	Ile	Trp	Leu	Phe	Ser	Ala	His	Met	Leu	Pro	Leu	Leu	Ala	Arg	Leu
145					150					155				160	
Cys	Leu	Val	Pro	Leu	Glu	Thr	Ile	Ala	Ile	Ile	Asn	Lys	Phe	Ala	Met
			165						170					175	
Ile	Phe	Thr	Gly	Leu	Glu	Val	Leu	Tyr	Phe	Leu	Gly	Ser	Asn	Leu	Leu
	180							185					190		
Val	Pro	Tyr	Asn	Leu	Ala	Lys	Ser	Ala	Tyr	Arg	Glu	Leu	Val	Gln	Val
	195						200					205			
Val	Glu	Val	Tyr	Gly	Leu	Leu	Ala	Leu	Gly	Met	Ser	Leu	Trp	Asn	Gln
	210					215						220			
Leu	Val	Val	Pro	Val	Leu	Phe	Met	Val	Phe	Trp	Leu	Val	Leu	Phe	Ala
225					230					235				240	
Leu	Gln	Ile	Tyr	Ser	Tyr	Phe	Ser	Thr	Arg	Asp	Gln	Pro	Ala	Ser	Arg

245 250 255
 Glu Arg Leu Leu Phe Leu Phe Leu Thr Arg
 260 265
 <210> 1941
 <211> 411
 <212> DNA
 <213> Homo sapiens
 <400> 1941
 ctggggccct gccccacagc atcatgatgg ggaaactccc cctggggggtc gtctccccctt
 60
 atgtgaagat gagttcgggg ggctacacgg accccctgaa attctacgcc accagctact
 120
 gcacagccta cggtcggggag gatttcaagc cccgtgtggg cagtcacgta ggcaccggct
 180
 acaaatcaaa tttccagccc gtggtctcat gccaaagccag tctggaggcc ttagacaacc
 240
 cggccagggg ggaacaagcc caggaccatt tccagtctgt ggccagccag agctaccgcc
 300
 ccctggaggt gcctgacggc aagcatcccc tgccctggag catgcgccag accagctcag
 360
 gctatgggcg ggagaagccc agtgcgggtc cccccaccaa ggaggtccgg a
 411

<210> 1942
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 1942
 Met Met Gly Lys Leu Pro Leu Gly Val Val Ser Pro Tyr Val Lys Met
 1 5 10 15
 Ser Ser Gly Gly Tyr Thr Asp Pro Leu Lys Phe Tyr Ala Thr Ser Tyr
 20 25 30
 Cys Thr Ala Tyr Gly Arg Glu Asp Phe Lys Pro Arg Val Gly Ser His
 35 40 45
 Val Gly Thr Gly Tyr Lys Ser Asn Phe Gln Pro Val Val Ser Cys Gln
 50 55 60
 Ala Ser Leu Glu Ala Leu Asp Asn Pro Ala Arg Gly Glu Gln Ala Gln
 65 70 75 80
 Asp His Phe Gln Ser Val Ala Ser Gln Ser Tyr Arg Pro Leu Glu Val
 85 90 95
 Pro Asp Gly Lys His Pro Leu Pro Trp Ser Met Arg Gln Thr Ser Ser
 100 105 110
 Gly Tyr Gly Arg Glu Lys Pro Ser Ala Gly Pro Pro Thr Lys Glu Val
 115 120 125
 Arg

<210> 1943
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 1943

nagaaacatt caggggtcca acaggggtgga aaacatgagg ctgcaggatg tttaacagga
 60
 gtcttttctg cagctcctct tggagccttt aacgagatac tatcatgcct atgaactgcc
 120
 acacagatgt acatggcata gcaactgccc aaagtatcag cccaaggaac cctactttcc
 180
 ccagcaacat ctaactcaga aatgctgac tttggcctca atctgggtccc aaaatacctc
 240
 caggggtatct tgggcttcgg tgtgttcaca cacttggtca tgtaaactctg aacacagact
 300
 ctctctgcct tggcaagaac cccccacacc cccatagata attacaccct ttgggtctcc
 360
 ctctgcaatc tcacctgcta gagacg
 386

<210> 1944

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1944

Met	Gly	Val	Trp	Gly	Val	Leu	Ala	Lys	Ala	Glu	Arg	Val	Cys	Val	Gln
1				5					10				15		
Ile	Tyr	Met	Thr	Lys	Cys	Val	Asn	Thr	Pro	Lys	Pro	Lys	Ile	Pro	Trp
			20					25					30		
Arg	Tyr	Phe	Gly	Thr	Arg	Leu	Arg	Pro	Lys	Ile	Ser	Ile	Ser	Glu	Leu
		35					40				45				
Asp	Val	Ala	Gly	Glu	Ser	Arg	Val	Pro	Trp	Ala	Asp	Thr	Phe	Gly	Gln
		50				55				60					
Cys	Tyr	Ala	Met	Tyr	Ile	Cys	Val	Ala	Val	His	Arg	His	Asp	Ser	Ile
65				70					75					80	
Ser	Leu	Lys	Ala	Pro	Arg	Gly	Ala	Ala	Ala	Lys	Thr	Pro	Val	Lys	His
			85					90						95	
Pro	Ala	Ala	Ser	Cys	Phe	Pro	Pro	Cys	Trp	Ser	Pro	Glu	Cys	Phe	
			100					105					110		

<210> 1945

<211> 443

<212> DNA

<213> Homo sapiens

<400> 1945

nacgcgtcac gaagcgcgct cggcccacgt ggctccaagg gcgtccacgc gcccctcctc
 60
 gaccgattgg tgcgaacat ggcacggtgg catgcgacgc gcaccaagat ccagctcaag
 120
 ctcgcatcc agcgantcgg catgctacag gagaaaaaag ccgcactgca taaaaaagtg
 180
 cgactggaaa ttgcggacnn tcgtagacgc caaaagcttg aatctgcgcg cgtcaaaacc
 240
 gaatcgctga tcatggacga tatacatttg gagttgcttg aactgcttga gctctactgt
 300

gagacactct atgccagatt cggattacta gaaggacgcg acaatgagcc tgatgatgcg
 360
 atccgcgagc cgatgatcgc cattattcat gcggctcatc gcacagaggt gaaggaacta
 420
 catgtgctcc aaaacatgct gaa
 443

<210> 1946
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 1946
 Xaa Ala Ser Arg Ser Ala Leu Gly Pro Arg Gly Ser Lys Gly Val His
 1 5 10 15
 Ala Pro Leu Leu Asp Arg Leu Val Ser Asn Met Ala Arg Trp His Ala
 20 25 30
 Thr Arg Thr Lys Ile Gln Leu Lys Leu Ala Ile Gln Arg Xaa Gly Met
 35 40 45
 Leu Gln Glu Lys Lys Ala Ala Leu His Lys Lys Val Arg Leu Glu Ile
 50 55 60
 Ala Asp Xaa Arg Arg Arg Gln Lys Leu Glu Ser Ala Arg Val Lys Thr
 65 70 75 80
 Glu Ser Leu Ile Met Asp Asp Ile His Leu Glu Leu Leu Glu Leu Leu
 85 90 95
 Glu Leu Tyr Cys Glu Thr Leu Tyr Ala Arg Phe Gly Leu Leu Glu Gly
 100 105 110
 Arg Asp Asn Glu Pro Asp Asp Ala Ile Arg Glu Pro Met Ile Ala Ile
 115 120 125
 Ile His Ala Ala His Arg Thr Glu Val Lys Glu Leu His Val Leu Gln
 130 135 140
 Asn Met Leu
 145

<210> 1947
 <211> 472
 <212> DNA
 <213> Homo sapiens

<400> 1947
 cggccgtgta ggccgtgacg gtgaccaaca gagccacagc gggcccgcgtg taggcgggag
 60
 gactgtgccg caggtgcagg agggtcagat ggaaacaaaa ggcgagggcg gcctccacaa
 120
 gcgccccgtg gggcacggat gtgcgcaggc cgcagctgca gctctgggcc atgaggctct
 180
 gcagcaggtg caggtcactg agctcccagg cccagcagag gcgcgtcagg gtgcaggcgg
 240
 cctgcatgcc cagcccctgt gccgccagct tcagcagcgt gccaggcaga gactcctcgg
 300
 ccatgaggaa ctccctgcagg gacacggtgg ggttggccga ggccccgtcc aagggtgaccc
 360
 cgtgcgccag gaagagcagg aagagcaggg tgagcagcag gtcaggccca aagtcgccag
 420

cccagggccc gagctcgaac agcgtcctca tctccaggaa gcaggccccg ag
472

<210> 1948
<211> 150
<212> PRT
<213> Homo sapiens

<400> 1948
Met Arg Thr Leu Phe Glu Leu Gly Pro Trp Ala Gly Asp Phe Gly Pro
1 5 10 15
Asp Leu Leu Leu Thr Leu Leu Phe Leu Leu Phe Leu Ala His Gly Val
20 25 30
Thr Leu Asp Gly Ala Ser Ala Asn Pro Thr Val Ser Leu Gln Glu Phe
35 40 45
Leu Met Ala Glu Glu Ser Leu Pro Gly Thr Leu Leu Lys Leu Ala Ala
50 55 60
Gln Gly Leu Gly Met Gln Ala Ala Cys Thr Leu Thr Arg Leu Cys Trp
65 70 75 80
Ala Trp Glu Leu Ser Asp Leu His Leu Leu Gln Ser Leu Met Ala Gln
85 90 95
Ser Cys Ser Ser Ala Leu Arg Thr Ser Val Pro His Gly Ala Leu Val
100 105 110
Glu Ala Ala Cys Ala Phe Cys Phe His Leu Thr Leu Leu His Leu Arg
115 120 125
His Ser Pro Pro Ala Tyr Ser Gly Pro Ala Val Ala Leu Leu Val Thr
130 135 140
Val Thr Ala Tyr Thr Ala
145 150

<210> 1949
<211> 395
<212> DNA
<213> Homo sapiens

<400> 1949
acgcgttgag ggaggcgaca tgcttcatga gcgcttgagg ccactgctca agcgacatct
60
gccccttgct gatgttgcaa ggcggacagg acggcatgta attcgactcg acgtcacgct
120
ccggatgcct cgacgggacg ctcacaagct tccattggcc attcggggt cgcttggtct
180
cgaccgcgcg tacaaccggg tctacatggt cgccatgccca ccgatcgggc aatggcattc
240
cacagtacgc gcagcggccg tcgtatttgc gccggagccg atcgcgctgt gctttcgtca
300
gccggctcac gctttatgct ccacggcagg tgtggcagca tcctggcagg cgactccaag
360
atccgcgcct gcgtccagct tgacggcgcc ggggt
395

<210> 1950
<211> 125
<212> PRT

<213> Homo sapiens

<400> 1950

```

Met Leu His Glu Arg Leu Ala Pro Leu Leu Lys Arg His Leu Pro Leu
 1           5           10           15
Ala Asp Val Ala Arg Arg Thr Gly Arg His Val Ile Arg Leu Asp Val
      20           25           30
Thr Leu Arg Met Pro Arg Arg Asp Ala His Lys Leu Pro Leu Ala Ile
      35           40           45
Arg Gly Ser Leu Gly Leu Asp Arg Ala Tyr Asn Arg Val Tyr Met Val
      50           55           60
Ala Met Pro Pro Ile Gly Gln Trp His Ser Thr Val Arg Ala Ala Ala
      65           70           75           80
Val Val Phe Ala Pro Glu Pro Ile Ala Leu Cys Phe Arg Gln Pro Ala
      85           90           95
His Ala Leu Cys Ser Thr Ala Gly Val Ala Ala Ser Trp Gln Ala Thr
      100          105          110
Pro Arg Ser Ala Pro Ala Ser Ser Leu Thr Ala Pro Gly
      115          120          125

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<210> 1951

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1951

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cggccgcccgc ctctccgctc ccggggccccc gccgccaccg cgccccccgc gggagatgga
60
acagcgggaac cggctcggtg cctcgggata cctgccgcct ctgctgctgc atgccctgct
120
gctcttcgtg gccgacgtg cattcacaga agtccccaaa gatgtgacag tacgggaggg
180
agacgacatc gaaatgccct gcgcgttccg ggccagcggg gccacctcgt attcgttgga
240
gattcagtgg tggtagctca aggagccacc ccgggagctg ctgcacgagc tggcgctcag
300
cgtgccgggc gcccgagca aggtaacaaa taaggatgca actaaaatca gcaccgtacg
360
cgt
363

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<210> 1952

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1952

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Arg Pro Pro Pro Leu Arg Ser Arg Ala Pro Ala Ala Thr Ala Pro Pro
 1           5           10           15
Ala Gly Asp Gly Thr Ala Glu Pro Ala Arg Cys Pro Arg Ile Pro Ala
      20           25           30
Ala Ser Ala Ala Ala Cys Pro Ala Ala Leu Arg Gly Arg Arg Cys Ile
      35           40           45
His Arg Ser Pro Gln Arg Cys Asp Ser Thr Gly Gly Arg Arg His Arg

```

```

      50              55              60
Asn Ala Leu Arg Val Pro Gly Gln Arg Ser His Leu Val Phe Ala Gly
65              70              75              80
Asp Ser Val Val Val Pro Gln Gly Ala Thr Pro Gly Ala Ala Arg
      85              90              95
Ala Gly Ala Gln Arg Ala Gly Arg Pro Glu Gln Gly Asn Lys
      100              105              110

```

<210> 1953
 <211> 329
 <212> DNA
 <213> Homo sapiens

```

<400> 1953
acgcgtcagc ctgagcccaa taactataaa agagtcgcaa ccatgactgt gctattgagt
60
gagcgcagcc agattttccg ggggtccgat gcctacgcgg tgcgggacta cgtcaaccag
120
catgtgggca gccactgcat tcgctgcct cccaagggcc ggccacgggc gagtatcagc
180
catcgacact ttgccagcct ggacctgtgc cgcacagct acggcgctcc ggtacgggtc
240
acatcggtgg cgctggagac catctatcac ctgcagatcc tgttgagcgg gcattgccgc
300
tccagctccc gtggtgagga tgacgtggn
329

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<210> 1954
 <211> 109
 <212> PRT
 <213> Homo sapiens

```

<400> 1954
Thr Arg Gln Pro Glu Pro Asn Asn Tyr Lys Arg Val Ala Thr Met Thr
1      5      10      15
Val Leu Leu Ser Glu Arg Ser Gln Ile Phe Arg Gly Ala Asp Ala Tyr
      20      25      30
Ala Val Ser Asp Tyr Val Asn Gln His Val Gly Ser His Cys Ile Arg
      35      40      45
Leu Pro Pro Lys Gly Arg Pro Arg Ala Ser Ile Ser His Arg Thr Phe
      50      55      60
Ala Ser Leu Asp Leu Cys Arg Ile Ser Tyr Gly Ala Pro Val Arg Val
65      70      75      80
Thr Ser Val Ala Leu Glu Thr Ile Tyr His Leu Gln Ile Leu Leu Ser
      85      90      95
Gly His Cys Arg Ser Ser Ser Arg Gly Glu Asp Asp Val
      100      105

```

<210> 1955
 <211> 415
 <212> DNA
 <213> Homo sapiens

<400> 1955

acgcgtggct cgacgaaaac caagtacgag acatgcccga caaggtacta tcacacatgg
60
tggaatactg ctggggggcgc ttcacagaca acatcaaata cgctgtagct gcccaatatt
120
ggaaagggcc acacaagccc gatagtgacc atcaacggat cattgtaggc tatttcaaaa
180
ccgccaaaaca agccatgaac gcagcaaaac aattccactg gaacacccgg ctacaacaac
240
aatggaaaac atggatactc ccagtccaca acggcacccgt gtccgagttt ttcacccaac
300
aaaaaacttt gctagacgag caagacgata gcaatagcga gctgccggag catctacaaa
360
acgtcatgtg cggcaaaaca ctccaccacc aagacgacac catatcgtgg tgcac
415

<210> 1956

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1956

Met	Pro	Asp	Lys	Val	Leu	Ser	His	Met	Val	Glu	Tyr	Cys	Trp	Gly	Arg
1				5					10					15	
Phe	Thr	Asp	Asn	Ile	Lys	Tyr	Ala	Val	Ala	Ala	Gln	Tyr	Trp	Lys	Gly
			20					25					30		
Pro	His	Lys	Pro	Asp	Ser	Asp	His	Gln	Arg	Ile	Ile	Val	Gly	Tyr	Phe
		35					40					45			
Lys	Thr	Ala	Lys	Gln	Ala	Met	Asn	Ala	Ala	Lys	Gln	Phe	His	Trp	Asn
	50					55					60				
Thr	Arg	Leu	Gln	Gln	Gln	Trp	Lys	Thr	Trp	Ile	Leu	Pro	Val	His	Asn
65				70					75					80	
Gly	Thr	Val	Ser	Glu	Phe	Phe	Thr	Gln	Gln	Lys	Thr	Leu	Leu	Asp	Glu
			85					90						95	
Gln	Asp	Asp	Ser	Asn	Ser	Glu	Leu	Pro	Glu	His	Leu	Gln	Asn	Val	Met
			100					105					110		
Cys	Gly	Lys	Thr	Leu	His	His	Gln	Asp	Asp	Thr	Ile	Ser	Trp	Cys	
		115					120						125		

<210> 1957

<211> 526

<212> DNA

<213> Homo sapiens

<400> 1957

acgcgttccg gagagatttt cctaacctct ctccgagctg ctgagccgat cgggtgaccac
60
caggagctcc tccctgtgag gacaaagtcc cagagtcggg gtcacggggc ttacttattg
120
gggaggaggc ccgccggggc cgcagtgggc gagggggcct tggcgcgctc ctgggaggtc
180
agacctggca cagtgtggcg aagggttcca gtgcgatccc gagtcgaggg cgcatttcgc
240
ggtgactgcc agcatgaacc gcagccgacc gagttctgcg atcgggcttc tccgcagagt
300

ggggaccctg gggaaggcgc caacttctct cctctgcccc cctcactccc cgcgggcgtc
 360
 cctggggccgc ctgcccgggc cgcactgggc ggctccatc gtcccttccc tctacctgca
 420
 ctgccccagg cgggagagag gccttggccc nncgaggac cagctgcagc gggcagcggg
 480
 gtctctgctcc cccaaccccc gccccatggc acggggctga accggt
 526

<210> 1958

<211> 175

<212> PRT

<213> Homo sapiens

<400> 1958

Thr	Arg	Ser	Gly	Glu	Ile	Phe	Leu	Thr	Ser	Leu	Arg	Ala	Ala	Glu	Pro
1				5					10					15	
Ile	Gly	Asp	His	Gln	Glu	Leu	Leu	Pro	Val	Arg	Thr	Lys	Phe	Gln	Ser
			20					25					30		
Arg	Gly	His	Gly	Pro	Tyr	Leu	Leu	Gly	Arg	Arg	Pro	Ala	Gly	Ala	Ala
		35					40					45			
Val	Gly	Glu	Gly	Pro	Leu	Ala	Arg	Ser	Trp	Glu	Val	Arg	Pro	Gly	Thr
	50					55				60					
Val	Trp	Arg	Arg	Phe	Pro	Val	Arg	Ser	Arg	Val	Glu	Gly	Ala	Phe	Arg
65					70				75					80	
Gly	Asp	Cys	Gln	His	Glu	Pro	Gln	Pro	Thr	Glu	Phe	Cys	Asp	Arg	Ala
				85					90				95		
Ser	Pro	Gln	Ser	Gly	Asp	Pro	Gly	Glu	Gly	Ala	Asn	Phe	Ser	Pro	Leu
			100				105						110		
Pro	Thr	Ser	Leu	Pro	Ala	Gly	Val	Pro	Gly	Pro	Pro	Ala	Arg	Ala	Ala
		115					120					125			
Leu	Gly	Gly	Leu	His	Arg	Pro	Phe	Pro	Leu	Pro	Ala	Leu	Pro	Gln	Ala
	130					135					140				
Gly	Glu	Arg	Pro	Trp	Pro	Xaa	Glu	Gly	Pro	Ala	Ala	Ala	Gly	Ser	Gly
145				150					155					160	
Val	Leu	Leu	Pro	Gln	Pro	Pro	Pro	His	Gly	Thr	Gly	Leu	Asn	Arg	
				165					170					175	

<210> 1959

<211> 378

<212> DNA

<213> Homo sapiens

<400> 1959

gtgcaccgga cggctcctcc aacggatcat gcgacggccc agcgggaaggc tcacccgagt
 60
 cgtcagaagg atcagggcgc ttgtcgtcgt cagacttcag gacatcccac gacatggtga
 120
 acggctggga ggagaccttg tccccgtcgg tcttggcgcc gacaacaaca ccgctcatgg
 180
 tgtattttcc ggcatgagtg aagaaccagt gggcatgctg atgaccttg atcggcagtg
 240
 aggtcctttt gaccacctga tatgtgtcat cagcgaggaa ggtgccgagt ttggcgctct
 300

cgtctgcctc ggggtgaattg ccgaggaggt acatcttgcc tggaccgta atcgcggtga
360

agtcgacgcg caacgcgt

378

<210> 1960

<211> 111

<212> PRT.

<213> Homo sapiens

<400> 1960

Met	Tyr	Leu	Leu	Gly	Asn	Ser	Pro	Glu	Ala	Asp	Glu	Asn	Ala	Lys	Leu
1				5					10					15	
Gly	Thr	Phe	Leu	Ala	Asp	Asp	Thr	Tyr	Gln	Val	Val	Lys	Gly	Ala	Ser
			20					25					30		
Leu	Pro	Ile	Lys	Gly	His	Gln	His	Ala	His	Trp	Phe	Phe	Thr	His	Ala
		35				40					45				
Gly	Lys	Tyr	Thr	Met	Ser	Gly	Val	Val	Val	Gly	Ala	Lys	Thr	Asp	Gly
	50					55				60					
Asp	Lys	Val	Ser	Ser	Gln	Pro	Phe	Thr	Met	Ser	Trp	Asp	Val	Leu	Lys
65					70					75				80	
Ser	Asp	Asp	Asp	Lys	Arg	Pro	Asp	Pro	Ser	Asp	Asp	Ser	Gly	Glu	Pro
				85				90					95		
Ser	Ala	Gly	Pro	Ser	His	Asp	Pro	Leu	Glu	Glu	Pro	Ser	Gly	Ala	
			100					105					110		

<210> 1961

<211> 384

<212> DNA

<213> Homo sapiens

<400> 1961

ggatccaccc cggaaaccgg caggatgaag ggggcaagtg aggagaagct ggcattctgtg
60
tccaacctgg tcaactgtgtt tgagaatagc aggacccag aagcagcacc cagaggccag
120
aggctagagg acgtgcatca ccgccctgag tgcaggcctc ccgagtcccc aggaccacgg
180
gagaagacga atgtcgggga ggccgtgggg tctgagccca ggacagtcag caggaggtac
240
ctgaactccc tgaagaacaa gctgtccagc gaagcctgga ggaaatcttg ccagcctgtg
300
accctctcag gatcggggac gcaggagcca gagaagaaga tcgtccagga gctgctggag
360
acagagcagg cctatgtggc gcgc
384

<210> 1962

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1962

Gly Ser Thr Pro Glu Thr Gly Arg Met Lys Gly Ala Ser Glu Glu Lys

```

      1           5           10           15
Leu Ala Ser Val Ser Asn Leu Val Thr Val Phe Glu Asn Ser Arg Thr
      20           25           30
Pro Glu Ala Ala Pro Arg Gly Gln Arg Leu Glu Asp Val His His Arg
      35           40           45
Pro Glu Cys Arg Pro Pro Glu Ser Pro Gly Pro Arg Glu Lys Thr Asn
      50           55           60
Val Gly Glu Ala Val Gly Ser Glu Pro Arg Thr Val Ser Arg Arg Tyr
      65           70           75           80
Leu Asn Ser Leu Lys Asn Lys Leu Ser Ser Glu Ala Trp Arg Lys Ser
      85           90           95
Cys Gln Pro Val Thr Leu Ser Gly Ser Gly Thr Gln Glu Pro Glu Lys
      100          105          110
Lys Ile Val Gln Glu Leu Leu Glu Thr Glu Gln Ala Tyr Val Ala Arg
      115          120          125

```

<210> 1963
 <211> 323
 <212> DNA
 <213> Homo sapiens

```

<400> 1963
nnncccttcc taccctccca tactccccac cctcttctct cccctgtgca tgagcttgca
60
ggcatgaaac acccacctgg cctctctccc tctgttttgc ccttctgtc gtctctctcc
120
cacagctgcc tggctcttcg gcgtcagtc accaccttct gcagctctcc ctcaccctgg
180
cgaccactca ggcatgcac tcgcgggccc cttcagacc tctcggggtc atcttccct
240
tccctggcca ttatttttct tcatctgggc tgggcccga ggggcgttcc ccccttctct
300
cttcttctct ttttttctc ttt
323

```

<210> 1964
 <211> 107
 <212> PRT
 <213> Homo sapiens

```

<400> 1964
Xaa Pro Phe Leu Pro Ser His Thr Pro His Pro Ser Ser Ser Pro Cys
1           5           10           15
Ala Glu Leu Ala Gly Met Lys His Pro Pro Gly Leu Ser Pro Ser Val
      20           25           30
Leu Pro Leu Leu Ser Ser Leu Ser His Ser Cys Leu Ala Leu Arg Arg
      35           40           45
Gln Ser Thr Thr Phe Cys Ser Ser Pro Ser Pro Trp Arg Pro Leu Arg
      50           55           60
His Ala Ser Arg Gly Pro Pro Ser Asp Leu Ser Gly Ser Ser Ser Pro
      65           70           75           80
Ser Leu Ala Ile Ile Phe Leu His Leu Gly Trp Ala Arg Arg Gly Val
      85           90           95
Pro Pro Leu Pro Leu Leu Ser Phe Phe Phe Ser

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100

105

<210> 1965
<211> 1416
<212> DNA
<213> Homo sapiens

<400> 1965
cggctggggc aggagctgga cgacgccacc atggacctgg agcagcagcg gcagcttgtg
60
agcaccctgg agaagaagca gcgcaagttt gaccagcttc tggcagagga gaaggcagct
120
gtacttcggg cagtggagga acgtgagcgg gccgaggcag agggccggga gcgtgaggct
180
cgggccctgt cactgacacg ggacttgag gagggagcagg aggcacgtga ggagctggag
240
cggcagaacc gggccctgcg ggctgagctg gaggcactgc tgagcagcaa ggatgacgtc
300
ggcaagagcg tgcattgagct ggaacgagcc tgccgggtag cagaacaggc agccaatgat
360
ctgcgagcac aggtgacaga actggaggat gagctgacag cggccgagga tgccaagctg
420
cgtctggagg tgactgtgca ggctctcaag actcagcatg agcgtgacct gcagggccgt
480
gatgaggctg gtgaagagag gcggaggcag ctggccaagc agctgagaga tgcagaggtg
540
gagcgggatg aggagcggaa gcagcgcact ctggccgtgg ctgcccgcaa gaagctggag
600
ggagagctgg aggagctgaa ggctcagatg gcctctgccg gccagggcaa ggaggaggcg
660
gtgaagcagc ttcgcaagat gcaggcccg atgaaggagc tatggcgagg ggtggaggag
720
acacgcacct cccgggagga gatcttctcc cagaatcggg aaagtgaaaa gcgcctcaag
780
ggcctggagg ctgagggtgct gcggctgcag gaggaactgg ccgcctcgga ccgtgctcgg
840
cggcaggccc agcaggaccg ggatgagatg gcagatgagg tggccaatgg taaccttagc
900
aaggcagcca ttctggagga gaagcgtcag ctggaggggc gcctggggca gttggaggaa
960
gagctggagg aggagcagac anactcagag ctgctcaatg accgctaccg caagctgctc
1020
ctgcaggtag agtcactgac cacagagctg tcagctgagc gcagtttctc agccaaggca
1080
gagagcgggc ggcagcagct ggaacggcag atccaggagc tacggggacg cctgggtgag
1140
gaggatgctg gggcccgtgc ccgccacaag atgaccattg ctgcccttga gtctaagttg
1200
gcccaggctg aggagcagct agagcaagag accagagagc gcattcctctc tggaaagctg
1260
gtgccccaaa gtaagaagcg gtttaaagag gtggtgctcc aggtggagga ggagcggagg
1320
gtggctgacc agctccggga ccagctggag aagggaaacc ttcgagtcaa gcagctgaag
1380

1485

cggcagctgg aggaggccga ggaggaggca tcccgg
1416

<210> 1966

<211> 472

<212> PRT

<213> Homo sapiens

<400> 1966

Arg Leu Gly Gln Glu Leu Asp Asp Ala Thr Met Asp Leu Glu Gln Gln
1 5 10 15
Arg Gln Leu Val Ser Thr Leu Glu Lys Lys Gln Arg Lys Phe Asp Gln
20 25 30
Leu Leu Ala Glu Glu Lys Ala Ala Val Leu Arg Ala Val Glu Glu Arg
35 40 45
Glu Arg Ala Glu Ala Glu Gly Arg Glu Arg Glu Ala Arg Ala Leu Ser
50 55 60
Leu Thr Arg Ala Leu Glu Glu Glu Gln Glu Ala Arg Glu Glu Leu Glu
65 70 75 80
Arg Gln Asn Arg Ala Leu Arg Ala Glu Leu Glu Ala Leu Leu Ser Ser
85 90 95
Lys Asp Asp Val Gly Lys Ser Val His Glu Leu Glu Arg Ala Cys Arg
100 105 110
Val Ala Glu Gln Ala Ala Asn Asp Leu Arg Ala Gln Val Thr Glu Leu
115 120 125
Glu Asp Glu Leu Thr Ala Ala Glu Asp Ala Lys Leu Arg Leu Glu Val
130 135 140
Thr Val Gln Ala Leu Lys Thr Gln His Glu Arg Asp Leu Gln Gly Arg
145 150 155 160
Asp Glu Ala Gly Glu Glu Arg Arg Arg Gln Leu Ala Lys Gln Leu Arg
165 170 175
Asp Ala Glu Val Glu Arg Asp Glu Glu Arg Lys Gln Arg Thr Leu Ala
180 185 190
Val Ala Ala Arg Lys Lys Leu Glu Gly Glu Leu Glu Glu Leu Lys Ala
195 200 205
Gln Met Ala Ser Ala Gly Gln Gly Lys Glu Glu Ala Val Lys Gln Leu
210 215 220
Arg Lys Met Gln Ala Gln Met Lys Glu Leu Trp Arg Glu Val Glu Glu
225 230 235 240
Thr Arg Thr Ser Arg Glu Glu Ile Phe Ser Gln Asn Arg Glu Ser Glu
245 250 255
Lys Arg Leu Lys Gly Leu Glu Ala Glu Val Leu Arg Leu Gln Glu Glu
260 265 270
Leu Ala Ala Ser Asp Arg Ala Arg Arg Gln Ala Gln Gln Asp Arg Asp
275 280 285
Glu Met Ala Asp Glu Val Ala Asn Gly Asn Leu Ser Lys Ala Ala Ile
290 295 300
Leu Glu Glu Lys Arg Gln Leu Glu Gly Arg Leu Gly Gln Leu Glu Glu
305 310 315 320
Glu Leu Glu Glu Glu Gln Thr Xaa Ser Glu Leu Leu Asn Asp Arg Tyr
325 330 335
Arg Lys Leu Leu Gln Val Glu Ser Leu Thr Thr Glu Leu Ser Ala
340 345 350
Glu Arg Ser Phe Ser Ala Lys Ala Glu Ser Gly Arg Gln Gln Leu Glu

```

          355          360          365
Arg Gln Ile Gln Glu Leu Arg Gly Arg Leu Gly Glu Glu Asp Ala Gly
  370          375          380
Ala Arg Ala Arg His Lys Met Thr Ile Ala Ala Leu Glu Ser Lys Leu
  385          390          395          400
Ala Gln Ala Glu Glu Gln Leu Glu Gln Glu Thr Arg Glu Arg Ile Leu
          405          410          415
Ser Gly Lys Leu Val Pro Lys Ser Lys Lys Arg Phe Lys Glu Val Val
          420          425          430
Leu Gln Val Glu Glu Glu Arg Arg Val Ala Asp Gln Leu Arg Asp Gln
          435          440          445
Leu Glu Lys Gly Asn Leu Arg Val Lys Gln Leu Lys Arg Gln Leu Glu
          450          455          460
Glu Ala Glu Glu Glu Ala Ser Arg
  465          470

```

<210> 1967

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1967

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aaatttgaat cctggaaagc tgatctcgat aagtcgtttg tcgagctggt tgcggcgttg
  60
ccgacgcgcc taatttggat cgtgcagtaa gagcttctcc attcctcggc gccaaagggg
  120
tgcattcacat ctgcgggcca gtcagctccc ctgggcttgc actcgtcggg gatgctggcc
  180
ttgcaccaga tcctctgtgg ggcgtcgggt gtggctgggc attccagtcg gcagcttggt
  240
tagtggactg taccggatct catttggtctg accggaccgc cttagatagg gcgcttcgca
  300
gttatcatcg ataccaccgg cattctcttg ggtggcatga acgcctcatc tctagatatg
  360
caaacggccg gggttttcat gcgctcgaga agctgatgct g
  401

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<210> 1968

<211> 94

<212> PRT

<213> Homo sapiens

<400> 1968

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Met His His Ile Ser Arg Pro Val Ser Ser Pro Gly Leu Ala Leu Val
  1          5          10          15
Gly Asp Ala Gly Leu Ala Pro Asp Pro Leu Trp Gly Val Gly Cys Gly
          20          25          30
Trp Ala Phe Gln Ser Ala Ala Trp Leu Val Asp Cys Thr Gly Ser His
          35          40          45
Leu Ala Asp Arg Thr Ala Leu Asp Arg Ala Leu Arg Ser Tyr His Arg
          50          55          60
Tyr His Arg His Ser Leu Gly Trp His Glu Arg Leu Ile Ser Arg Tyr
          65          70          75          80
Ala Asn Gly Arg Gly Phe His Ala Leu Glu Lys Leu Met Leu

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85

90

<210> 1969
 <211> 464
 <212> DNA
 <213> Homo sapiens

<400> 1969
 nncatcgacg cgcactggac tcattctgggt gacggccac agatggacac tctgcgcgag
 60
 gaggtcgccg ttcaccgct caggatgct gtcaccctgc tcggtcacgt cgccaacacc
 120
 cagggtcatgg cgaccagcg tgatctcaaa ccgtcagtat tcgtcaacct ctctctctcg
 180
 gaaggacttc ctgtatcaat gatggaggtt gcttccctcg gtatcccat tatcgcgact
 240
 ggcgctggcg gagtaggaga aatcgctctg tctgacaacg ggcattctatt gcctgccgag
 300
 ttcaccgaca cccaggcatc tgacgcgtta gtgcagctgg cacgtctgtc tgaggacgag
 360
 taccagcagg tgtgtcaggc ctcccgccag gtgtgggaag aaaagtccg cgctctgtc
 420
 gtctaccccg aattctgtcg cgagtgtgg ggcgacgtg atca
 464

<210> 1970
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 1970
 Xaa Ile Asp Ala His Trp Thr His Leu Gly Asp Gly Pro Gln Met Asp
 1 5 10 15
 Thr Leu Arg Glu Glu Val Ala Val His Arg Val Thr Asp Ala Val Thr
 20 25 30
 Leu Leu Gly His Val Ala Asn Thr Gln Val Met Ala Thr Gln Arg Asp
 35 40 45
 Leu Lys Pro Ser Val Phe Val Asn Leu Ser Ser Ser Glu Gly Leu Pro
 50 55 60
 Val Ser Met Met Glu Val Ala Ser Leu Gly Ile Pro Ile Ile Ala Thr
 65 70 75 80
 Gly Val Gly Gly Val Gly Glu Ile Val Ser Ser Asp Asn Gly His Leu
 85 90 95
 Leu Pro Ala Glu Phe Thr Asp Thr Gln Ala Ser Asp Ala Leu Val Gln
 100 105 110
 Leu Ala Arg Leu Ser Glu Asp Glu Tyr Gln Gln Val Cys Gln Ala Ser
 115 120 125
 Arg Gln Val Trp Glu Glu Lys Phe Arg Ala Ser Val Val Tyr Pro Glu
 130 135 140
 Phe Cys Arg Glu Cys Trp Gly Asp Ala Asp
 145 150

<210> 1971
 <211> 520

<212> DNA

<213> Homo sapiens

<400> 1971

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accggttgta ggtgtacaaa cactgctgac atcagccagc tcctgagtgt caggagagac
60
acagaagtac tcagggtgtt tgtgtgttga ccgagagAAC agctcagatt gaggaacgag
120
acagacgacg acaaaaacaa ttagagcatc agttgataca atacaaatgg aatataatgc
180
atctaacatt tcaaattcaa gacatgattc tgatgaaatc agtggtaaaa tgaatacata
240
tatgaattct acgacttcta agaaggatac tgggtgtgcaa acagatgact taaatatagg
300
aatattcacc aatgcagaat cacattgtgg atcattaatg gagagggaca tcacaaattg
360
ttcatctcct gagatttcgg cagaacttat tggacagttt agcaccaaga aaaacaagca
420
agaactaact caggataaag gagccagctt agaaaaagaa aacaatcggg gtaatgacca
480
gtgtaatcag ttcacaagaa ttgagaaaca aacaaaacag
520

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<210> 1972

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1972

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Met Glu Tyr Asn Ala Ser Asn Ile Ser Asn Ser Arg His Asp Ser Asp
  1           5           10           15
Glu Ile Ser Gly Lys Met Asn Thr Tyr Met Asn Ser Thr Thr Ser Lys
          20           25           30
Lys Asp Thr Gly Val Gln Thr Asp Asp Leu Asn Ile Gly Ile Phe Thr
          35           40           45
Asn Ala Glu Ser His Cys Gly Ser Leu Met Glu Arg Asp Ile Thr Asn
          50           55           60
Cys Ser Ser Pro Glu Ile Ser Ala Glu Leu Ile Gly Gln Phe Ser Thr
          65           70           75           80
Lys Lys Asn Lys Gln Glu Leu Thr Gln Asp Lys Gly Ala Ser Leu Glu
          85           90           95
Lys Glu Asn Asn Arg Cys Asn Asp Gln Cys Asn Gln Phe Thr Arg Ile
          100          105          110
Glu Lys Gln Thr Lys Gln
          115

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<210> 1973

<211> 331

<212> DNA

<213> Homo sapiens

<400> 1973

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acgcgtacct atgccacgag catggcggat cagttgaccg cggcactagg cagctactta
60

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tccgcaggtc aaaagaaatc ggacggcctc ggatccttct tcgtggccac tacccttgaa
 120
 gagctacaag cgatgaacag cgatactcgc ttcaccacga gcgtgggaat cgacctatcc
 180
 cccgctcgat ctttctccgc ttgggcgctg cgcggaacga ctttttctgc gccgtcgatg
 240
 acaaaggctt cccgctcgag ctcgcccgca ccaagcgac cgcgtcgctg tggcaaaagc
 300
 tggcgtcgc cgccagtga atcgtgtgca c
 331

<210> 1974
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1974
 Met Ala Asp Gln Leu Thr Ala Ala Leu Gly Ser Tyr Leu Ser Ala Gly
 1 5 10 15
 Gln Lys Lys Ser Asp Gly Leu Gly Ser Phe Phe Val Ala Thr Thr Leu
 20 25 30
 Glu Glu Leu Gln Ala Met Asn Ser Asp Thr Arg Phe Thr Thr Ser Val
 35 40 45
 Gly Ile Asp Leu Ser Pro Ala Arg Ser Phe Ser Ala Trp Ala Leu Arg
 50 55 60
 Gly Thr Thr Phe Ser Ala Pro Ser Met Thr Lys Ala Ser Arg Ser Ser
 65 70 75 80
 Ser Ala Ala Pro Ser Ala Pro Arg Arg Cys Gly Lys Ser Trp Arg Ser
 85 90 95
 Pro Pro Val Lys Ser Cys Ala
 100

<210> 1975
 <211> 370
 <212> DNA
 <213> Homo sapiens

<400> 1975
 acgcgtcggg ccaatcgctc gtggagctgc aaaccgcgct gcaagcccgc gacgagcaac
 60
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<210> 1976

<211> 121
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 <213> Homo sapiens

<400> 1976
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 35 40 45
 Val Gly Val Gly Leu Cys Leu Arg Arg Asp Val Ala Arg Ser Leu Arg
 50 55 60
 Gln Arg Ile Ala Asn Leu Leu Leu Thr Ala Arg Arg Val Gly Thr Arg
 65 70 75 80
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<210> 1977
 <211> 551
 <212> DNA
 <213> Homo sapiens

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<210> 1978
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<400> 1978

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Pro Leu Pro Ala Val Ser Pro Thr Ser Phe Ile Pro Pro Val Thr Arg
      35           40           45
Glu Val Gln Ile Phe Gln Pro Gly His Cys Leu Pro Ser Arg Leu Ala
    50           55           60
Pro Pro Val His Leu Leu Cys Ser Ser Leu Cys Asn Ser Leu Ala Ala
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<210> 1979

<211> 5530

<212> DNA

<213> Homo sapiens

<400> 1979

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<210> 1980

<211> 929

<212> PRT

<213> Homo sapiens

<400> 1980

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Glu Glu Val Gln Glu Arg Ala Glu Pro Pro Gly His Pro His Pro Leu
50           55           60
Ala Gln Arg Arg Arg Ser Lys Gly Leu Val Gln Asn Ile Asp Gln Leu
65           70           75           80
Tyr Ser Gly Gly Gly Lys Val Gly Tyr Leu Val Tyr Ala Gly Gly Arg
85           90           95
Arg Phe Leu Leu Asp Leu Glu Arg Asp Gly Ser Val Gly Ile Ala Gly
100          105          110
Phe Val Pro Ala Gly Gly Gly Thr Ser Ala Pro Trp Arg His Arg Ser
115          120          125
His Cys Phe Tyr Arg Gly Thr Val Asp Ala Ser Pro Arg Ser Leu Ala
130          135          140
Val Phe Asp Leu Cys Gly Gly Leu Asp Gly Phe Phe Ala Val Lys His
145          150          155          160
Ala Arg Tyr Thr Leu Lys Pro Leu Leu Arg Gly Pro Trp Ala Glu Glu
165          170          175
Glu Lys Gly Arg Val Tyr Gly Asp Gly Ser Ala Arg Ile Leu His Val
180          185          190
Tyr Thr Arg Arg Ala Ser Ala Ser Arg Pro Cys Arg Arg Ala Pro Ala
195          200          205
Ala Lys Pro Pro Arg Pro His Arg Arg Pro Thr Ser Met Leu Arg Arg
210          215          220
Thr Ala Thr Arg Ala Asp Ala Gln His Ala Ser Gln Leu Leu Asp Gln
225          230          235          240
Ser Ala Leu Ser Pro Ala Gly Gly Ser Gly Pro Gln Thr Trp Trp Arg
245          250          255
Arg Arg Arg Arg Ser Ile Ser Arg Ala Arg Gln Val Glu Leu Leu Leu
260          265          270
Val Ala Asp Ala Ser Met Ala Arg Leu Tyr Gly Arg Gly Leu Gln His
275          280          285
Tyr Leu Leu Thr Leu Ala Ser Ile Ala Asn Arg Leu Tyr Ser His Ala
290          295          300
Ser Ile Glu Asn His Ile Arg Leu Ala Val Val Lys Val Val Val Leu
305          310          315          320
Gly Asp Lys Asp Lys Ser Leu Glu Val Ser Lys Asn Ala Ala Thr Thr
325          330          335
Leu Lys Asn Phe Cys Lys Trp Gln His Gln His Asn Gln Leu Gly Asp
340          345          350
Asp His Glu Glu His Tyr Asp Ala Ala Ile Leu Phe Thr Arg Glu Asp
355          360          365
Leu Cys Gly His His Ser Cys Asp Thr Leu Gly Met Ala Asp Val Gly
370          375          380
Thr Ile Cys Ser Pro Glu Arg Ser Cys Ala Val Ile Glu Asp Asp Gly
385          390          395          400
Leu His Ala Ala Phe Thr Val Ala His Glu Ile Gly His Leu Leu Gly
405          410          415
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420          425          430
Glu Asp Lys Arg Leu Met Ser Ser Ile Leu Thr Ser Ile Asp Ala Ser

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565				570				575							
Gln	Cys	Ser	Arg	Ser	Cys	Gly	Gly	Gly	Val	Gln	Phe	Ala	Tyr	Arg	His
580				585				590							
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595				600				605							
Arg	Ala	Ile	Tyr	His	Ser	Cys	Ser	Leu	Met	Pro	Cys	Pro	Pro	Asn	Gly
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Lys	Ser	Phe	Arg	His	Glu	Gln	Cys	Glu	Ala	Lys	Asn	Gly	Tyr	Gln	Ser
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Thr	Gly	Tyr	Tyr	Val	Val	Phe	Ser	Pro	Lys	Val	Thr	Asp	Gly	Thr	Glu
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Phe	Asn	Lys	Lys	Ser	Lys	Gly	Tyr	Thr	Asp	Val	Val	Arg	Ile	Pro	Glu
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805				810				815							
Leu	His	Gly	Met	Gly	Tyr	Ser	Ala	Thr	Lys	Glu	Ile	Leu	Ile	Val	Gln
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Ile	Leu	Ala	Thr	Asp	Pro	Thr	Lys	Pro	Leu	Asp	Val	Arg	Tyr	Ser	Phe
835				840				845							
Phe	Val	Pro	Lys	Lys	Ser	Thr	Pro	Lys	Val	Asn	Ser	Val	Thr	Ser	His
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<212> PRT
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<210> 1984
 <211> 127
 <212> PRT
 <213> Homo sapiens

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 Phe Ile Asp Ile Ile Gly Ser Thr Lys Leu Ser Leu Glu Tyr Asp Ser
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 Tyr Thr Val Val Asp Leu Leu Asn Arg Phe Tyr Thr Ile Val Val Glu
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 Glu Val Asn Arg Ala Gly Gly Val Val Asn Lys Phe Ala Gly Asp Ala
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<212> DNA
<213> Homo sapiens
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<212> PRT
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